The Mining Journal,

RAILWAY AND COMMERCIAL GAZETTE:

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 1360.—Vol. XXXI. LONDON, SATURDAY, SEPTEMBER 14, 1861. {STAMPED.....SIXPENCE. {UNSTAMPED..FIVEPENCE.

MR. JAMES CROFTS, SHAREBROKER, No. 1, FINCH LANE, CORNHILL. (Established 17 years.)

Mr. Crofts is a BUYER of shares in the following mines (cash on receipt of transfer, or exchanges made for other shares):—Brynford Hall, Great Martha, East Caradon, Great South Tolgus, Herodsfoot, Wheal Norris, Marke Valley, North Minera, North Dolcoath, Carn Camborne, Great Retallack, Dale, Great Alfred, Alfred Consols.

Mr. Crofts is a SELLER of 25 Rosewarne and Herland, at 1s. 6d. per share net.

The paying shares in EAST WHEAL MARTHA COPPER MINE being all subscribed for, the £2 10s. paid-up ones become of increased value, being the only ones to which the public can resort as an investment. Mr. Crofts has business to transact in them, but recommends early applications.

*** Holders of mining shares DIFFICULT OF SALE in the OPEN MARKET may hear of purchasers, and also parties IN ARREAR OF CALLS, or sued by merchants, may learn their true legal position and be advised how to act, by applying to Mr. Crofts.

SPECIAL BUSINESS in EAST WHEAL MARTHA (LIMITED) paid-up shares, £2 10s. each.

MR. JAMES LANE, No. 44, THREADNEEDLE STREET, LONDON, E.C.

James Lane has FOR SALE, at nett prices:—20 Arthur, 9s. 6d.; 10 Alfred Consols, £1; 3 Billins, £17½; 20 Carn Camborne, 27s. 6d.; 20 Crebor, 11s. 6d.; 20 Devon Union; 20 Dale, 16s.; 5 East Caradon, £26½; 10 East Treskerby, 21s.; 10 East Russell, £3½; 20 Great Wheal Martha, 37s. 6d.; 5 Gonamena, £2¾; 20 Great Retallack, 26s. 6d.; 2 Herodsfoot, £35; 20 Lady Bertha, 16s. 6d.; Ludcott; 20 Lady Eliza, 7s. 6d.; 5 Mary Ann; 10 Marke Valley, £10½; 20 Molland, 1s. 6d.; 20 North Hallenbeagle, 21s.; 10 North Downs, £6; 2 North Roskear, £18½; 20 North Nant-y-Mwyn, 5s.; 15 Nant-y-Iago, £1; 3 Pant-y-buarth, £6; 20 Penhale Moor; 5 Rosewarne Consols, 22s.; 20 South Condurrow, 9s. 6d.; 5 Trelawny, £15; 5 West Caradon, £38; 20 Wheal Moyle, £2; 1 West Rose Down, £19; 30 Wheal Wrey; 20 West Polmear, 12s. 6d.; 5 Wheal Anne, 30s.; 25 Ribden, 6s.; 20 Sortridge, 11s.; 5 Trumpet United, 12s.; 5 St. Ives Wheal Allen; and 20 Unity, 22s. 6d.

PETER WATSON, ENGLISH AND FOREIGN STOCK, SHARE, AND MINING OFFICES, 79, OLD BROAD STREET, LONDON, E.C.

Telegraphic messages to Buy or Sell Mine Shares punctually attended to.

MR. W. LELEAN, MINE SHAREBROKER, 11, ROYAL EXCHANGE, LONDON, E.C.

MR. THOMAS SPARGO, SHAREBROKER, 224 and 225, GRESHAM HOUSE, OLD BROAD STREET, LONDON, E.C.

Commission, 2½ per cent.

MR. E. GOMPERS, MINING OFFICES, 3, CROWN CHAMBERS, THREADNEEDLE STREET, LONDON, E.C.

BUSINESS TRANSACTED in BRITISH and FOREIGN STOCKS and SHARES.

Terms, 1¼ per cent.—Bankers: London and Westminster Bank.

JOHN RISLEY, SHAREBROKER, 32, LOMBARD STREET, LONDON, E.C.

MR. T. ROSEWARNE, 75, OLD BROAD STREET, LONDON, E.C., has FOR SALE:—

Calstock Consols, 12s.	Hingston, £3½.	St. Day United, 13s. 6d.
Drake Walls, 20s. 6d.	Lady Bertha, 16s. 6d.	South Margaret, 10s.
East Russell, £3½.	North Downs, £6.	Marke Valley, £10 8s 9d.
East Devon Con., 40s.	Pelyn Wood, 2s. 9d.	Wheal Edward, 38s.
East Grenville, 40s.	Stray Park, £33.	Wheal Arthur, 10s.
Gawton, 4s.	So. Caradon Hooper, 20s.	Wheal Norris, 37s.
Great Wh. Martha, 37s 6d	Sortridge, 9s. 6d.	West Polmear, 18s. 9d.

T. Rosewarne is in a position to name six mines which are safe for a great rise.

T. Rosewarne is a BUYER of—

Marke Valley.	East Caradon.	East Russell.
Stray Park.	Drake Walls.	Sortridge.
		North Robert.

September 13, 1861. Bankers: Bank of London.

MR. R. H. M. JACKMAN, MINING AND SHAREBROKER, 2, ADAM'S COURT, OLD BROAD STREET, TRANSACTS BUSINESS in EVERY DESCRIPTION of SHARES, at closest prices nett, or on commission, but not being a dealer buys and sells only on orders confided to him.

SHARES FOR SALE, free of any commission:—

20 Kelly Bray, 16s.	5 Alfred Consols, 18s.	1 South Frances, £120.
50 Unity, 21s. 9d.	20 Wheal Wrey, 5s.	5 East Caradon, £25¾.

Sept. 13, 1861. Bankers: London and Westminster, Lothbury.

MR. JAMES HUME, SHAREBROKER, 74, OLD BROAD STREET, LONDON, E.C.

The "Mining Share Monitor," published monthly, contains valuable information on the soundest dividend and progressive mines. Free for 6d., or 5s. per annum. Advice to capitalists by letter or personally.

Bankers: London Joint-Stock Bank.

MESSRS. R. HORLEY AND CO., SWORN STOCK, SHARE, and MINING BROKERS, 45, CORNHILL, E.C. (late of 2, Royal Exchange-buildings), continue to TRANSACT EVERY DESCRIPTION OF MINING BUSINESS, and are in a position to obtain reliable information respecting all dividend and progressive mines.

N.B.—Messrs. Horley and Co. publish a Weekly Mining List, with the closing prices every Wednesday, and will be most happy to forward the same (gratis) on application.

MR. GEORGE BATTERS, 5, COWPER'S COURT, BIRCHIN LANE, DEALER in BRITISH MINING SHARES and OTHER SECURITIES.

Mr. Batters, from long experience and intimate acquaintance with all Mining Stocks, can advise as to investment of capital, at closest market prices, and has made a selection of Dividend paying and sound Progressive Stocks into which he can with confidence recommend investments at present depressed prices. The favourable turn in the market for metals, and the reduction in the Bank's rate of interest, would point to prices having seen their lowest for the present.

Mr. Batters is a BUYER of Great Wheal Martha, East Carn Brea, North Minera, South Carn Brea, Brynford Hall, Cook's Kitchen, Wheal Unity, Great Retallack, East Caradon, Marke Valley, and Wheal Edward.—And is a SELLER of 10 Wheal Ludcott, £3½; 25 Wheal Grenville, 34s.; 20 Wheal Trelawny, £14; 100 Wheal Unity, £1⅛; 1 Stray Park, £35; 2 South Frances, £122½; 2 Providence, £43¼; 10 East Carn Brea, £3¼; 50 East Grenville, 41s.; 75 Great Wheal Martha; 20 Marke Valley, £10½; 50 Merilyn, 20s.; 100 Lady Bertha, 17s. 6d.; 5 Cook's Kitchen, £30¾; 2 Caradon Consols, £9¼; and 60 North Minera, 27s. 6d.

MR. GEORGE BUDGE, SHAREBROKER, No. 4, ROYAL EXCHANGE BUILDINGS, LONDON, E.C. (Established 14 years), has FOR SALE the following shares:—100 Great Treveddoe, 14s. 9d.; 10 East Caradon, £25¾; 50 Dale, 16s.; 2 East Basset, £82½; 1 South Wheal Frances; 30 Tolcarne, £3¼; 10 West Union, £2 17s.; 50 West Polmear; 3 Old Tolgus; 10 Marke Valley, £10½; 5 Refuiack, £2; 5 Stray Park; 100 East Grenville, 39s.; 100 North Nant-y-Mwyn, 5s.; 50 Great Martha; 4 Cook's Kitchen, £30¾; 5 Billins, £17; 10 Creiake, £3¼; 2 Providence; 50 Great Retallack, 25s. 9d.; 1 South Caradon, £309; 3 North Treskerby, £35¼; 3 Wheal Damsel; 3 West Bryn Gwiog, £29; 50 Lady Eliza, 8s. 6d.; 100 East Martha; 50 Drake Walls, 17s. 6d.; 50 Drake Walls, 17s 6d.; 3 West Sharp Tor; 100 Wheal Arthur, 9s.; 200 Bon Accord, 21s. 6d.; 1 Devon Great Consols; 1 Wheal Clifford, £155; 50 Treweatha; 10 Cargoll; 50 East Treskerby, £1; 25 Grent South Tolgus; 100 Kapunda, £2 2s.; 10 East Carn Brea; 50 Buller and Basset, 10s.; 25 Hingston Down, £3; 4 Trelawny, £14; 3 Wheal Margaret, £44.

Holders of mining shares difficult of sale may find purchasers through Mr. Budge.

Daily lists of prices forwarded on application.

FIFTEEN to TWENTY, and even TWENTY-FIVE PER CENT. PER ANNUM upon current value of shares, in CORNISH TIN and COPPER MINES.

Dividends payable two-monthly or quarterly.

MESSRS. TREDINNICK AND CO., MINING ENGINEERS, SEND their SELECTED LIST OF SOUND PROGRESSIVE AND DIVIDEND SHARES upon the receipt of a Fee of One Guinea.

Review of Cornish and Devon Mining Enterprise, 5s. per copy.

Maps per post of the Buller and Basset, Great Vor, Alfred Consols, the Providence and Margaret Districts, 2s. 6d. each.

Cornish Mines, well selected, pay better than any other description of securities, are freer from risks, and entail less responsibilities than banks and other joint-stock companies. Shares bought and sold on commission of 2½ per cent.

Money advanced at 10 per cent. annually, for short or long periods, upon approved Mining Shares.—78, Lombard-street, London, E.C

BRITISH AND FOREIGN STOCK, RAILWAY, AND MINING SHARES BOUGHT AND SOLD. A considerable amount of money is locked up in mining shares not prominently before the public, and consequently difficult of sale. Messrs. FULLER AND CO., 26, CHANGE ALLEY, CORNHILL, LONDON, invite the holders of such stock to communicate with them, having channels for the purchase and sale of shares of every description, independent of the mining market.

FOR SPECIAL SALE:—Messrs. Fuller and Co. have £6500 worth of shares on hand, paying regular dividends of from 12½ to 15 per cent. Also, £2750 worth of progressive shares, upon which from 200 to 300 per cent. profit may be realised in a few months, and perfectly free from risk. Full particulars may be had.

Telegraphic messages promptly attended to.

Bankers: Bank of England.

GEORGE MOORE, 1, CROWN COURT, THREADNEEDLE STREET.

In any business that George Moore is favoured with, in which he is the buyer, he will give CASH ON RECEIPT OF TRANSFER.

JAMES HERRON has FOR SALE the following SHARES, at the prices quoted, and FREE OF COMMISSION:—

20 Alfred Consols, 17s. 6d.	1 Gt. Fortune, £14 10s.	40 So. Condurrow, 9s. 9d.
5 Bedford United.	20 Great Retallack, 26s. 6d.	20 South Caradon Hooper, 20s. 9d.
2 Bryn Gwiog, £28½.	10 Hings. Down, £3⅛.	1 South Caradon, £305.
5 Billins, £17.	2 Herodsfoot, £35¾.	1 St. Ives Cons., £33½.
2 Brynford Hall, £21¾.	1 Herward Untd., £9 17 6	50 Sortridge Cons., 8s 9d.
30 Buller and Basset.	5 Holmbush, £1 19s.	20 St. Day, 12s. 9d.
3 Craddock Moor, £28½.	1 Kitty (Leiant), £7 18s 6d	1 South Bryn Gwiog, £12 18s. 9d.
1 Carn Brea, £70.	30 Kelly Bray, 18s. 9d.	15 South Carn Brea, £3¼
5 Cobre, £37½.	50 Lady Bertha, 16s. 6d.	1 S. W. Frances, £118½
40 Cefn Cilcen, 12s.	10 Linares, £7¼.	3 Silver Rake, £14 15s.
20 Camborne Vean, 40s. 9d.	5 Long Rake, £13 10s.	20 Tincroft, £6 5s.
30 Carn Camborne, 25s.	10 Ludcott, £3 5s.	50 Silver Bank (20s. paid) 12s.
5 Caradon Consols.	20 Lady Eliza, 7s. 6d.	3 Trelawny, £14½.
1 Cargoll, £15⅝.	10 Marke Valley, £10 11 3	30 Tamar Con., £1 10s.
50 Crookhaven (an offer wanted).	40 Merilyn, 12s.	10 Tolvadden.
5 Calvadnack, £9½.	100 Molland, 10d.	5 Treloweth, £3½.
2 Cook's Kit., £31½.	1 Mary Ann, £9 10s.	50 Utd. Mexican, £5¾.
20 Cuddra, 35s.	50 North Minera.	50 Vale of Towy, 5s. 10d.
10 Crelake, £3.	5 North Basset, £5 8s 9d	2 W. R. Down, £17 18 9
40 Dale, 16s.	1 North Treskerby, £33¾	10 West Stray Park, £5¼.
20 Deep Level, 12s. 6d.	5 North Downs, £6.	2 West Sharp Tor.
30 Drake Walls, 19s. 6d.	10 New Treleigh, 37s. 9d.	20 Wheal Unity, 21s. 6d.
1 Devon Great Cons., £355	100 Nanteos & Penrhiw (an offer wanted).	1 West Seton.
10 Dyfngwm, £9⅛.	1 New Seton, £44.	2 West Basset, £17¾.
50 Dun Mountain, 19s. 6d.	50 North Rhine, 7s.	50 Worthing, 12s. 6d.
10 East Russell, £3 1s. 3d.	30 Nant-y-Iago, 15s.	1 Wen. Con., £13 17s 6d.
20 East Carn Brea, £8¼.	10 North Crofty, £5.	40 Wh. Grenv., 30s.
20 East Grenville, 39s. 6d.	20 New Frances, 11s. 6d.	10 Wheal Harriett, 24s 6d
5 E. Caradon, £25 10s.	1 North Roskear, £17¾.	20 Wheal Crebor, 10s.
50 English and Australian Copper, £3 10s. 9d.	10 North Buller (an offer wanted).	1 Wh. Margaret, £48½.
20 East Kongsberg (fully paid up £5), 30s.	50 N. Nant-y-Mwyn, 4s 3d	10 Wh. Edward, £1 15s.
10 East Rosewarne, 24s. 9d.	20 North Hafod, 11s.	5 Wheal Uny, £4¼.
1 East Basset, £85.	5 No. Frances, £3 18s. 9d.	30 West Polmear, 14s.
20 East Alfred, 33s. 9d.	10 North Robert, 14s. 9d.	20 West Tolcarne, 8s. 3d.
1 East Pool.	3 Old Tolgus.	1 Wheal Seton.
5 Great S. Tolgus, £4 4s.	20 Okel Tor, 21s. 6d.	10 Wheal Moyle.
2 Grambler, £10 18s. 9d.	50 Port Phillip, 21s. 6d.	30 W. So. Caradon, 19s 6d
20 Great Alfred, 8s. 9d.	1 Providence, £42¾.	20 West Tolgus.
40 Great Moelwyn (£1 10s. paid), 16s. 9d.	30 Prosper United.	2 West Caradon, £39¾.
20 Gonamena, £2.	10 Pendeen, £5¼.	5 Wheal Grylls.
50 Gt. Northern Copper, 30s.	1 Rosewarne Utd., £24¾.	20 Wheal Prosper.
20 Great Crinnis, 22s. 6d.	20 Rosewall Hill & Ransom, 28s. 9d.	20 West Wendron, 12s 9d.
10 Great Buay, £4 18s. 9d.	50 Ribden, 5s.	20 Wheal Arthur, 7s 10d.
20 Great Martha, 36s. 9d.	20 St. John del Rey, £38½.	5 Wheal Hearle.
	1 Stray Park.	10 Wheal Wrey, 4s. 9d.

And is a BUYER of 100 Rosewall Hill and Ransom United, 50 West South Caradon, 100 North Minera, 5 Trelawny, and 10 Bryn Gwiog.

2, Adam's-court, Old Broad-street, September 13, 1861.

MESSRS. VIVIAN AND REYNOLDS, 68, OLD BROAD STREET, LONDON, E.C., MINING ENGINEERS, INSPECTORS of MINES, COMMISSION, and GENERAL AGENTS for the PURCHASE or SALE of MINE SHARES, RAILWAY, and EVERY OTHER DESCRIPTION of STOCK.

Commission on share transactions, 1¼ per cent. on £100 and above, and 2½ per cent. for less sums.

MR. C. POWELL, MINE SHAREBROKER, 2, SPREAD EAGLE COURT, FINCH LANE, LONDON, E.C.

MR. EDWARD COOKE, MINING, STOCK, AND SHAREBROKER, 5, HERCULES PASSAGE, THREADNEEDLE STREET, LONDON, E.C., will feel much pleasure in advising those who may favour him with their confidence on the merits of the various mines usually dealt in, and also on any new concerns that are from time to time brought before the notice of the public, and has FOR SALE, at the following NETT PRICES:—

5 East Caradon, £26½.	25 Unity, £1.	2 Wheal Margaret, £46½
10 Marke Valley, £10½.	5 Cook's Kitchen, £30¾.	2 Long Rake, £14.
100 Charlotte Utd., 18s. 9d.	25 East Wh. Damsel, £1⅞.	12 Tolvadden, £2⅛.
60 Polgear, 5s.	55 East Budnick, 5s.	10 Crelake, £3¼.
25 Nant-y-Iago, £1.	1 Rosewarne Utd., £21½.	3 Trelawny, £14.
25 Carn Camborne, 25s.	10 Rosewall Hill, £1¼.	12 No. Grambler, £5¾.

BUYER of Tincroft, £5⅞; Grylls, £4¾.

Sept. 14, 1861. Bankers: London and Westminster, Lothbury.

MR. J. S. PHILLIPS, C.E. AND M.E., SHAREBROKER, &C., 12, ST. MICHAEL'S ALLEY, CORNHILL, LONDON, is now on a tour through the Cornish mines.

RICHARD CLIFT, MINE SHAREDEALER, late of Redruth, now 48, THREADNEEDLE-STREET, LONDON, where all letters are to be addressed.

MR. J. SYKES, LEEK, STAFFORDSHIRE, is in a position to advise speculators as to the purchase of shares which will increase in value 100 per cent. in twelve months. The opportunity should not be lost. He will guarantee 25 per cent. of the loss, if he be allowed 25 per cent. of the profits.

WANTED:—100 Dale, and 100 Ribden, state lowest price.

FOR SALE:—20 Great Retallack, 24s.; 10 Lady Bertha, 18s.; 10 Crebor, 12s.

WILLIAM SEWARD, MINING BROKER, STOCK AND SHAREDEALER, 26, THROGMORTON STREET, LONDON, E.C.

Commission, 1¼ per cent. on £100 and above, and 2½ per cent. on less sums.

MR JOSEPH GREGORY, MINING OFFICES, 1, BANK CHAMBERS, LOTHBURY, E.C.

BUSINESS TRANSACTED in BRITISH and FOREIGN STOCKS and SHARES.

Terms, 1¼ per cent. on £100 and above, 2½ per cent. on smaller sums.

Bankers: City Bank, Threadneedle-street.

JOHN GLEDHILL AND CO., MINE AGENTS AND SHAREBROKERS, MINING OFFICES, CORN EXCHANGE, LEEDS.

STOCK AND CO., LEAD AND SILVER SMELTERS, PENCLAWDD, NEAR SWANSEA.

MESSRS. THOMAS PENROSE and THOMAS PRICE UNDERTAKE ASSAYS and ANALYSES of EVERY DESCRIPTION of MINERAL PRODUCT, FUEL, and MANURES, at Messrs. Richardson and Co.'s Assay Office and Laboratory, Copper Ore Wharves, Swansea.

MR. M. GILDROY STEWART, CONSULTING MINING ENGINEER, COLLIERY VIEWER AND SURVEYOR, INSPECTOR AND VALUER OF MINES AND MACHINERY, BEDMINSTER, BRISTOL.

MESSRS. C. TOOKEY, F.C.S., AND M. W. JOHNSON, F.C.S., ASSAYERS, ANALYSTS, AND CONSULTING CHEMISTS. LABORATORIES, 44, LINCOLN'S INN FIELDS, W.C.

GEORGE RICE, SHAREBROKER, 1, FINCH LANE CORNHILL, has SPECIAL BUSINESS in 15 Caradon Consols, 30 East Caradon, 25 East Russell, 120 East Grenville, 5 Grambler, 25 Hingston, 50 Great Retallack, 40 Lady Bertha, 50 Merilyn, 4 Stray Park, 20 Tolvadden, 3 West Caradon, 100 Unity, 150 Sortridge Consols, 100 Fowey and Par United, 15 Wheal Ludcott, 20 Marke Valley. The market is still good. There are several shares which might be bought with advantage. (List will be sent on application.)

East Caradon.—Those of my clients who acted upon my advice of last week to sell at £28¼, have secured great profits, as the price has fallen to £25¼, or £3 per share. The 60 east is now worth about £25 per fm., and 60 west £15 per fm.; 50 east, £25 per fathom. The cross-cut south is through the new lode, which is poor. The mine, therefore, nearly at every point has fallen off considerably, and shares should still be sold at present prices. Marke Valley.—Good to buy.

MR. MURCHISON'S REVIEW OF BRITISH MINING FOR THE QUARTER ENDING 30TH MARCH, 1861, is NOW READY. Price One Shilling. At 117, Bishopsgate-street Within, London, E.C.

CHARLES DAVEY AND CO., SAFETY FUSE MANUFACTURERS, ST. HELEN'S JUNCTION, LANCASHIRE.

MR. T. P. THOMAS, MINING AGENT AND AUCTIONEER, 2, CROWN COURT, THREADNEEDLE STREET, LONDON.

MR. T. E. W. THOMAS, MINING AGENT AND GENERAL MINING SHAREDEALER, 16, HACKINS HEY, LIVERPOOL.

JOHN ROBERT PIKE has FOR SALE the FOLLOWING SHARES, all calls paid:—

4 Bryn Gwiog, £24½.	50 Unity, 17s. 9d.	3 Treiyon Consols, £18½.
10 Calvadnack, £8½.	20 No. Frances, £3 18s 9d.	200 Vale of Towy, 5s. 3d.
1 Carn Brea.	50 Great Martha, 31s. 6d.	2 Wendron Consols, £13.
5 Cook's Kitchen, £31½.	4 North Roskear, £18.	4 West Caradon, £40.
1 Copper Hill, £125.	2 Providence, £43.	7 West Frances, £14.
50 East Alfred, £1 13s. 6d.	40 So. Car. Hooper, 21s 6d	100 Wheal Arthur, 8s.
3 Gramb. & St. Aub., £13	1 South Frances, £117½.	1 Buller, £87½.
50 Great Retallack.	2 South Tolgus, £30.	100 Wheal Crebor, 9s. 3d.
10 Hingston Down, £3½.	100 St. Day United, 13s 9d.	2 Wheal Margaret, £45.
50 North Downs, £6.	50 Tincroft, £6 3s. 9d.	100 West Polmear, 14s.

Mr. Pike will be happy to insert any shares in his list free of charge unless sales are effected, when his commission will be 1¼ per cent.

Business transacted for the fortnightly accounts upon receipt of 25 per cent. on the current market prices.

3, Pinners-court, Old Broad-street, London, E.C.

FOWEY AND PAR UNITED MINE.—MR. H. B. RYE would CALL the ATTENTION of his friends and the public to this PROMISING young MINE, the locality being one of the best in Cornwall, with good management, and requiring little additional outlay for its development. Further particulars on application.

77, Old Broad-street, London, E.C.

LEVANT MINE.—MR. H. B. RYE is a BUYER herein, and will treat on application and price.—77, Old Broad-street, London, E.C.

FREDERICK WILLIAM MANSELL, MINING OFFICES, 1, HATTON COURT, THREADNEEDLE STREET, LONDON, E.C.

Bankers: London Joint-Stock Bank.

MR. JAMES HAMMON, STOCK AND SHAREDEALER, 1, CROWN COURT, THREADNEEDLE STREET, LONDON.

DEVON NEW COPPER MINING COMPANY (LIMITED).— THREE HUNDRED AND FIFTY paid-up (£2) SHARES in this mine TO BE SOLD, at £1 per share.—Apply to Messrs. Ellis and Co., No. 2, Royal Exchange-buildings, London.

VALUABLE TIN MINE.—A FEW GENTLEMEN have SPENT a LARGE SUM of MONEY in OPENING an EXCELLENT TIN MINE in CORNWALL, and there is no doubt that it will soon give large profits. An INTEREST THEREIN, and also in TWO OTHER FIRST-RATE MINES in full working, certain soon to pay well, MAY BE OBTAINED by *bona fide* investors in *bona fide* mines [on application to James Hollow, Mining Offices, Leiant, Hayle, Cornwall, and 1, Crown-court, Old Broad-street, London, E.C.—September 13, 1861.

NORTH WALES—SLATE QUARRYING PROPERTY.—The UNEXPIRED TERM of a LEASE of a FIRST-CLASS MINERAL PROPERTY TO BE DISPOSED OF, in the neighbourhood of FESTINIOG.—For further particulars, apply to Mr. W. R. Williams, mining engineer and mineral surveyor, Dolgelly, North Wales.

ROOFING SLATE and SLAB QUARRY TO BE SOLD, now in work, sending slates to market, and capable of being worked to good profit by one individual. Satisfactory reasons will be given for its disposal.—For particulars, apply to Mr. Arthur, Garreg, Llanfrothen, Carnarvon.

ON SALE, an EXCELLENT SLATE QUARRY, on reasonable terms.—For further particulars, apply to "D. R.," slate rock inspector, Llanllyfni, Carnarvon.

MERSEY DOCK ESTATE.—The MERSEY DOCKS AND HARBOUR BOARD REQUIRE the SERVICES of a COMPETENT PERSON to FILL the POSITION of ACTING RESIDENT ENGINEER, and to take charge of such works as are now in progress of execution, as well as those in operation. The salary will be £1500 per annum.

Testimonials as to competency, and of having had experience in works of a similar character, must be forwarded to the Secretary of the Mersey Board on or before the 1st October next. By order, DANIEL MASON, Sec.

Dock Office, Liverpool, September 5, 1861.

TO MINING ENGINEERS AND SURVEYORS.—The ADVERTISER, who has had considerable experience in the working of thick and thin coal, and ironstone mines, is DESIROUS of MEETING with a SITUATION as ASSISTANT, or to TAKE the MANAGEMENT of a SMALL COLLIERY. Is well up in mapping, dialling, levelling, and surveying, &c. First-class references.—Address, "A. Z.," Post-office, Dudley.

WANTED, SEVEN THOUSAND POUNDS, secured on lead and silver ores of ample value. A liberal interest paid.—Apply to "W. B.," Messrs. Waterlow and Sons, Birchin-lane, Cornhill.

WANTED, an AGENCY, by a PRACTICAL MINER, aged 32 years. Has had 12 years' experience as an agent in Cornish and other mines, and thoroughly understands both underground and surface operations, also mapping and planning, and can give unexceptionable testimonials.—Address, "A. B.," Post-office, Ramsey, Isle of Man.

SOUTH WALES STEAM COAL.—The LESSEES of a VALUABLE STEAM COAL PROPERTY of 1000 acres, possessing special advantages, are DESIROUS of MEETING with PARTNERS WILLING to INVEST SEVEN-EIGHTHS of the capital. The property lies within a convenient distance from a seaport, and has a direct rail communication with the North of England. References, and reports on the property by eminent mining engineers from the counties of Monmouth and Glamorgan, and by practical mineral surveyors acquainted with the locality, will be supplied on application to "A. B. M.," *Mining Journal* office, 26, Fleet-st., London.

EDWARDS'S PATENT MINERAL ORE AND COAL WASHING MACHINE.—This is by far the MOST ECONOMICAL, both in cost and in working, as well as the MOST DURABLE and EFFICIENT MACHINE made. Complete machine, capable of washing from 25 to 50 tons per diem (according to quality), £75.—Full particulars, testimonials, &c., may be obtained from E. Edwards, Esq., C.E., Beaufort-buildings, Strand, London.

TO COAL OWNERS AND COKE BURNERS.

MACKWORTH'S PATENT COAL WASHER, OR PURIFIER.—This MACHINE will EXTRACT the SHALE and ALL HEAVY IMPURITIES from SMALL COAL at a COST of TWOPENCE PER TON.—For particulars and references, apply to the makers, A. and T. Fry, Temple-gate Works, Bristol; or to Mr. Jos. Rider, Rasinghall-street, Leeds.

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Original Correspondence.

MACHINERY FOR MINING.

SIR,—The cause of disease of which many miners make most complaint is the excessive toil of beating the borer. As is well known, a very large part of the miner's work consists in striking the head of a long chisel with a heavy hammer to form holes in hard rock, which are to be charged with powder for blasting. The rock is very hard, the hammer often 8 lbs. in weight, the position for working constrained, the air breathed poor, hot, moist, sometimes dusty, and almost always deficient in oxygen. It is, therefore, no wonder that the miner finds himself soon exhausted, nor that he should attribute much of what he suffers from to this part of his occupation. It is, morever, very disagreeable work, because of its dull monotony, fatiguing the body without exercising the mind; injurious and distasteful to the miner, and very expensive to his employer. It is just the sort of work we should like best to see performed by inanimate power, directed and controled in its operation by intelligent workmen, who would thereby obtain larger earnings with less toil, and with far less injury both to body and mind than they now can. The correspondence which has recently appeared in your columns upon the application of machinery to mining shows that many ingenious minds are turning their attention in this direction, and there is little doubt that something of the kind will be at least tried. There is, however, little hope of any machine being much used the first cost of which is very large. The fate of the man-engine should be a warning to us; nothing is more probable than that it would pay well to put down such engines, if we could be certain of the continued employment of many men; but that doubt has prevented the introduction of more than four man-engines in all Cornwall. It will be just the same with engines for boring if their first cost be very large, even though the expense of working them should promise to be small, as is highly probable. We trust, therefore, that mechanists will bear in mind the necessity of such engines being, if possible, cheap of construction, or at least such as can be removed from any mine which may cease to be productive to another, without very much expense. The cost of mere force produced by steam, and paid for in coal, is so very much less than human force produced by food, and paid for in wages, that the sole difficulty in using the former economically is that of conveying the power from the place where it is generated to the places where it is to be applied. To erect a system of gearing down the shafts and along all the levels of a mine to carry the power from the engine to all the points where borers are being driven (as is done in factories to every automatic machine) would be formidable indeed, both from first cost and difficulty of keeping such a system of gearing in working order. The power consumed by friction of gearing for merely conveying it would be very considerable, and it would be no trifling task to keep it at work with any moderate degree of safety. These difficulties are, indeed, so great as to be by many considered quite insurmountable.

It has, however, been suggested that though the difficulties of conveying power by gearing may, perhaps, not be surmounted, they may be avoided, and the power carried to the places at which it is to be used without gearing at all, either by means of water or of air in motion. The details of the plans proposed have not yet been made public, I can, therefore, speak of them only very generally, with the view rather of inviting enquiry than expressing opinions. One proposal is to convey water in pipes, under as high pressure as is convenient, to such parts of a mine where a considerable amount of boring has to be done, and to employ the water to work hydraulic engines or turbines, with which either to beat borers or turn drills for holing, as may be preferred. The cost would be the piping, the turbines, and the expense of pumping up the water; the saving would be the wages for doing the extra work the machine would enable the miners employing it to perform. Another proposal is a modification of a plan suggested by Mr. Brunton, C.E., formerly of Newport—to force compressed air instead of water to work a beating machine. A third is by means of a large air-pump worked by a steam-engine on the surface, to exhaust air from pipes, drawing it from air-engines worked by atmospheric pressure in the mine. Such an air-engine would resemble a small steam-hammer, but worked by pressure of the air instead of by that of steam, by which borers might be beaten and holes driven much faster than by hand. It would not be difficult to give a hundred or more blows a minute, instead of eight or ten, if the borer were kept cool by a small jet of water, which would also keep the hole clear, and prevent annoyance from dust. A fourth proposal is to cause a strong current of air to pass through all the workings by drawing air from the up-cast shaft by a large air-blowing machine, like that used for a blast-furnace, but drawing not driving the air. Such engines often work with a pressure of 3 in. of mercury, or more than 200 lbs. on each square foot. A very small part of such a pressure would suffice to carry the air through a mine, and such part of the rest as is employed would be available for motive-power. The simplest mode of employing the power would probably be by using a sort of windmill, or large smoke-jack, to be turned by the current of air in the level nearest to the borer to be beaten, or drill to be turned.

The mechanical effect of any of these plans would be to transfer the cheap steam power produced by the combustion of coal at the surface into the depths of the mine, and to employ it there (less the part wasted by the friction consumed in its transference, and other losses), in substitution for the very costly force of human muscles, employed at great disadvantage, and to a great extent in doing that which requires no skill which an automatic tool cannot imitate; nay, such a tool might be made much to surpass human labour in many cases, because it might be made to do the work of many men in places where there is neither room nor air enough for many to work together. If the air-engines are used, the ventilation and coolness of the workings would be effectually secured, with great benefit to the health and comfort of the men.

When we recollect the enormous difference between the cost of steam or water power and of human force used merely as power, it seems impossible that the former should not ultimately displace the latter, leaving it at liberty for work in which skill is essential. Let anyone imagine what mining would be if pumping had to be done by hand; how many men would be needed to do the work performed by a bushel of coal; how completely inaccessible most of our mines would practically be if the cost of unwatering them was, as it would be, far greater than the value of their produce. Is not the case of many mines now nearly parallel to that supposed? Is it not certain that many mines are now not workable at all, and others not workable at a fair profit, because the value of the ore to be got is consumed, or would be more than consumed, in the cost of getting it, and that the only prospect of remedy is from the successful employment of machinery.

Much of the ill-health of miners is attributed to poor living, bad lodging, and to excess of work to which they are tempted by the mode of paying customary among them. The only mode for improving their condition in these respects is by rendering their work more productive; any efforts for securing to the working miner merely a larger share of what is now produced, if they do not altogether fail, as such efforts almost invariably do, would be ultimately injurious to him, by deterring those inclined to mining adventure from engaging in it. Its risks are too great already to bear the addition which combinations amongst the men for artificial rise of wages would inevitably bring, even though, as is almost certain, no rise of wages would be effected by them. I hope, therefore, our Cornish friends are too wise to trust to that exploded fallacy of trade unions. Nothing which is not beneficial to both employers and employed can be beneficial to either, but that which by substituting cheaper mechanical force for dearer human force, reserving the latter for work alone requiring skill and judgment, will be, must be, beneficial to all; will permit mines to be worked which are now unprofitable, and explorations to be made to depths now practically inaccessible; will open mines in months which now need years for their development; will diminish risk and increase product, will make skill and knowledge more valuable, by making mere animal force ess necessary.

The successful application of machinery may be destined to produce, and perhaps soon, as great a revolution in mining as it has in so many other branches of industry. Of course, it is not to be expected that that very impracticable class who pride themselves on being practical men, and nothing more, will believe this—it would be quite contrary to their nature if they did. They will act now as such men have always acted, resisting every change, disbelieving everything they have not themselves seen, however familiar it may be elsewhere or to others. Any one who reads the lives of Brindley, Watt, Stephenson, Clegg, or of any other great discoverer, may see what difficulties they had to encounter from "practical men," so called. In Watt's case he could only get his engine even tried in a mine (although its success in pumping had been previously proved) on condition of taking all the risk himself, by being paid one-third of the saving of coal he effected. And after Cornish engines had fully established their high reputation, it is only quite recently and occasionally that pumping by them, or on their principle, is tried in other parts of the country. "Practical men" in Lancashire and Staffordshire do not seem to believe—do not, at least, act as if they believed—that the same means which save coal in Cornwall would save it in Staffordshire; and we quite expect that the same class in Cornwall will act as they do elsewhere, and always have done—that is, as if they did not believe in the possibility of machinery being applied to mining, or to anything that has not yet been done. Yet far more difficult applications of it have been accomplished, notwithstanding the prognostications of the "practical men" of those days, that the novelties then proposed were impossibilities. Aqueducts, gas-lighting, railways, steamships, steam-printing, and penny postage, are familiar examples of improvements at first scouted as wild impossibilities, proving to be very possible indeed when taken in hand by men acting upon the proverb that what has been done in one way may be done in another; who, disregarding all prognostications of certain failure in which the mere "practical men" of that day indulged, tried, and succeeded.

I do not wish it to be supposed that the application of machinery to mining will be easy; I know full well it will be very difficult to get it even tried, still more so generally introduced. The advantages of its successful introduction would, however, be so great as to justify great efforts being made. It would, perhaps, be well for those who seek to get it employed to make some such arrangement with mine adventurers as Watt did when introducing his pumping engines—that is, agree to set up the machinery, and to be paid in proportion to the saving it effects in working. This seems to be Mr. Crease's idea, as shown by his offer published in his letter of Aug. 23, but his terms are not such as would suit all cases. It would not be very difficult to arrange fair terms, on which such machinery might be set up by one party, to be worked and paid for by another, to the mutual advantage of both; for though the adventurers would not get so much profit from it as if they set up the machinery themselves, they would be saved the necessity of raising the capital, and from the risk of a new application of it, for which advantages they could well afford to pay, by allowing a liberal share of the profits produced to those who incur the risk. It is well worth consideration whether it would not be wise to divide this risk among as many as possible of those who will be most benefited if the project succeed, by forming a limited liability company for the introduction of excavating machinery in mines the proprietors of which may prefer hiring to purchasing such machinery. The advantages would be twofold: such machinery would thus be more rapidly put to the test of trial with much less risk to any, than if set up at the exclusive cost of one mine; and, secondly, the engineers of such a company would learn the advantages and disadvantages of different kinds of excavating machinery far better and faster than those seeing it in operation at one mine only, and would, therefore, be most likely to conduct the business with success and profit. I am not aware that any such company is purposed, but such an one would have a very fair prospect of success, and would be almost certain of introducing great improvements in mining. No very large amount of capital would be needed for a first start, and it might be easily increased if found to be profitably employed. H.

P.S.—If any doubt the possibility of excavating by machinery, let him read what is being done at the tunnel through Mount Cenis by the machines invented by MM. Grattoni and Sommellier. Are Englishmen less skillful or less enterprising than Frenchmen?

SAFETY-LAMPS FOR COLLIERIES.

SIR,—There is great difficulty in making a fair comparison between all the various safety-lamps in use or proposed, from the want of a collection of all their varieties at one place. There are a considerable number at the Museum of Practical Geology, in Jermyn-street, but that collection is far from complete, and it wants also a short description of the lamps exhibited, stating their alleged advantages, their comparative safety, prices, durability, lighting power, and where each may be procured. If any of your correspondents competent to the task would publish a list of the safety-lamps in use, with such a statement appended, he would be conferring an inestimable service to the cause of humanity. P. H. HOLLAND.

P.S.—I trust a complete collection of lamps will be shown at the International Exhibition next year.

VENTILATION OF COLLIERIES.

SIR,—Your correspondent, "G. R.," will find that in practice as well as theory the system of forcing air into mines instead of drawing it out possesses innumerable advantages; not the least of which is the circumstance that you have it pure at all points where it is permitted to escape into the workings. It should be considered that when the air is supplied to the mine by means of pipes, as I propose, it is entirely under control; whilst on the ordinary system it is, to say the most, only partially so. Your correspondent seems to doubt that it is better to force the air than to employ the suction process, and requires some evidence in support of the opinion. I think you will admit no better evidence can be given than the fact that our London firemen always place their engines as ne[ar] the supply of water as possible, and would prefer forcing the water f[or] [a] quarter of a mile through a hose, than even placing their engine midway, and having half suction. Yet upon the existing system of colliery ventilation suction alone is used.

Next, as to the escape of air at the joints. I will undertake to say that from one hundred pipe-joints the escape of air will be no greater than from a single trap-door, and that for safety the system of forcing air in is infinitely superior. The joints in my pipes could be made air-tight, and with such facility that any collier could make the joints. No "blacksmiths, plumbers, or gas-fitters," would be required, and the cost would be so small, that I am convinced no objection would arise upon that point. The use of such a contrivance as Smith and Phillips's clip-joints would ensure an air-tight connection and a lasting joint. The use, moreover, of these joints would admit of one or more lengths of pipe being removed and replaced by new ones in the possible—but improbable—event of an accident, and replaced in a few minutes—certainly in one-tenth the time that it would take to readjust a broken trap-door.

As to my opinion that the same sized machine would force in more air than it would draw out, "G. R." almost answers his own question. If the suction principle be applied, it is apparent that there will be a tendency to rarefy the air—in other words, each 10,000 cubic feet of space in the machine will draw out only 8000 feet of air at atmospheric pressure; but, if the air be forced in, each 10,000 feet will force in 10,000 feet, so that there is 20 per cent. in favour of forcing. By forcing, moreover, every miner would have an ample supply of pure fresh air in substitution of the foul damp air he is now compelled to breathe. With regard to the economy of working, I confidently believe that there would be such a decrease in working a moderate-sized mine that the entire outlay for my machinery would speedily be repaid. RICHARD HUGH HUGHES,

Atlas Safety Gas-fitting Works, Hatton-garden.

AURIFEROUS STEEL.

SIR,—Nothing could be more satisfactory than Mr. Longmaid's answer to my enquiries respecting his system of making steel—that is to say, his answers are a series of bold assertions, free from all attempts to involve the discovery in mystery; but I still maintain the opinion, even assuming gold to have a beneficial effect upon the quality of steel, that the addition of the infinitessimal proportions given by Mr. Longmaid would not produce the desired effect, and that if the proportion be increased sufficiently for any effect to be produced upon the iron, the process would be so costly that it could not be applied for commercial purposes. I quite agree with the remarks of the *Mining Journal*, that if Mr. Longmaid's process succeed it "will secure him an enviable reputation both in the chemical and manufacturing worlds," and no one can wish him greater success than I do; but when a gentleman comes forward with a discovery which involves notions which overturn all existing ideas relating to the manufacture of iron, he must at least expect to be called upon to prove that what he asserts is correct.

Mr. Longmaid states that he *can* produce alloys of gold and iron as nearly approaching uniformity as the alloys (chemically speaking) now sold as iron and steel, but to prove that his process is worthy of adoption he must be able to state, from experiments made before reliable authorities, that he *has* produced it. I will defy him to produce a single ton of uniform quality. I take no unfair advantage—I mean commercially uniform, not chemically so. If the proportions mixed be one part gold to 140,000 parts iron I defy him to produce a ton of his alloy which shall correspond within 30 per cent. He will be unable (unless by very many consecutive meltings, continually adding the reduced alloy to a fresh charge of pure iron—a process which would be too expensive to be useful) to produce an alloy ten samples from which shall vary less than from one in 100,000 to one in 200,000. He proposes an alloy containing only 67 one-millionths of an ounce in each ounce of iron.

At one time it was thought that sulphur and phosphorus had a very deleterious effect upon iron and steel, but no one ventured to attribute it to such proportions as those named. It must be remembered that even 99·98 per cent. iron and 00·02 per cent. sulphur and phosphorus is 20,000 one-millionths of an ounce impurity to each ounce of iron, which is 300 times greater than Mr. Longmaid's proportions. Again, he objects to my comparison that to attempt to alloy 67 parts of gold with 99,999,933 parts of iron would offer as great difficulty as to mix a drop of olive oil with a hogshead of distilled water, and says substitute a drop of sulphuric acid. I maintain that from the difficulty of dealing with the gold in mixing it with iron the oil and water is a much better simile than sulphuric acid and water. But that Mr. Longmaid may have every advantage, let him mix 67 gallons of sulphuric acid with 99,999,933 gallons of water, and combine them as intimately as he can; will he then expect litmus paper to be acted upon? I say he will obtain no reaction—he will obtain none by the tests usually employed. The only advantage that can accrue from Mr. Longmaid's process is because the addition of the gold is insufficient to deteriorate the metal, for it should be remembered that he infers the alloy of *pure* iron with *pure* gold, and that it would be extremely difficult and costly to obtain pure iron. It has yet to be shown that the secret of any success which Mr. Longmaid may have achieved does not result from increased expenditure in the manipulation of the iron, rather than from any effect produced from the gold. We should remember, moreover, that if we except Mr. Robert Mushet, who has certainly manufactured a large quantity of steel by a new process, nothing has been found to supersede the old method—even Mr. Bessemer is said to be employing the old process in reference to his own. It would be highly interesting to have Mr. Mushet's opinion upon auriferous steel, and also upon the probable effect of adding 67 parts of titanium to 99,999,933 parts of iron. J. WEBB.

Tipton, Sept. 10.

VOLCANIC ACTION.

SIR,—I suppose Mr. Evan Hopkins is still in Dublin; he has not yet made his appearance in Glasgow at any rate, and I am beginning to feel afraid that I shall not have the pleasure of showing him what I consider to be incontestable evidences of the effect of intense heat proceeding from dykes and interstratifications of trap. I have now before me two large specimens of clayband ironstone, taken from the vicinity of a trap-dyke in one of the Ayrshire mines; they are both from the same stratum of mineral, but at different distances from the trap. One of these specimens is of a yellowish-brown colour (the natural colour), and produces no sensible effect on the magnetic needle; the other is of an iron-grey colour, precisely that of calcined ironstone, and is highly magnetic. I have also before me a large specimen of altered coal from the Newton Pit, near Glasgow, taken from the locality of the trap-dyke; this possesses all the features of coke, so much so that the workmen themselves always speak about it as "burnt coal." I am of opinion that Mr. Hopkins will find it a very difficult task to prove satisfactorily that these changes in the coal and ironstone can possibly be produced by "contact of dissimilar substances when in a moist condition:" whilst every piece of coke and calcined ironstone which one may meet with furnishes very satisfactory proof that such changes have been produced by heat. Volcanic action may be defined to be any action similar in effect to what is produced by volcanoes. In trap-dykes we have a mass of rock raised from an unknown depth by some gigantic force, and at the time of upheaval this rock must have been in a molten condition, hence the propriety of the term "volcanic action" as applied to these phenomena.

On Saturday last I measured a distance of 64 feet, through which one of the mainways of a coal mine had been driven in a tongue or interstratification of trap. In the drivage there was no indication of the position of the dyke itself: below the trap was the regular "thill" or floor, and above was the coal shale, but somewhat confused in condition. I would ask your correspondent, who thinks that the heat proceeding from trap dykes may be attributed entirely to friction or abrasion of one rock substance on another, how he would account for such an injection of trap as is presented to one in such a case as this? Also, what has become of the coal which this trap has displaced? MARK FRYAR.

School of Mines, Andersonian University, Glasgow.

THE GEOLOGICAL FORMATION OF THE EARTH—No. III.

SIR,—Having before expressed my belief that all rocks are more or less stratified, I purpose submitting my views on this point; but before doing so I would observe that there is nothing in creation at a stand, it is all either growing or decaying,—some may be but the work of a day, others millions of years. The great work of creation may be classed under three heads, or, rather, it undergoes three processes:—First, the earth, in her mighty work, annually sheds forth vegetation in all its varied forms and shades of colour: this may be fairly classed as the first process. Then the greater portion of her crops are consumed by the graminivorous animals, whence, to all appearance, it assumes new forms and substances, in the shape of flesh, blood, bone, sinew, &c.; this I call the second process. Again, the carnivorous animal (of whom man may well rank foremost) in turn consumes the graminivorous; this may be termed the third process. It is wisely ordained that all matter, either animal or vegetable, should increase and multiply; and if not consumed on arriving at maturity it retrogrades, withers, and dies. With vegetation such is the case, so also with the graminivorous and carnivorous animals; the old die and become decomposed, passing off in gases to supply the source from which it originally came; whilst the young is propagated from the seed that has been sown, arrives at maturity, and again falls into decay. Such is the natural working law of the earth. All matter appears to move in a uniform and continued circuit, there is nothing lost, neither is there anything added,—vegetation and the graminivorous and carnivorous animals are all of the same substance, passing occasionally through refineries. I believe there is not a particle in nature but is more or less amalgamated with the earth's first vegetation; as a proof, what is the cause of blood being red, and the flowers of the earth and even the shells on the sea-shore to be so beautifully variegated? Not a colour is to be found in the wide-spread field of nature but a corresponding and equally beautiful has been dug by man from the interior of the earth. To the practical man it is well known these beautiful colours are found in the upper portions of the lodes, as a flower is found on its stem; that they are artificially produced from the metals or minerals there can be no doubt. And to the question put by some one in the Journal of last week, "Is colour a substance?" I have no hesitation in answering—Yes; who can doubt it? In my endeavour to explain as briefly as possible my views on these points, I fear I have trespassed too much on the space allowed in the columns of the Journal to such subjects. I purpose now making a few cursory observations on what becomes of the mineral gases spontaneously ascending from the interior of the earth, as well as the ores dug out and brought to surface by the miners, also the coals consumed, and the lead, &c., evaporated or carried off from smelting-works.

It is well known that lead smelting, as conducted on the old system, wastes or evaporates many hundred-weights of ore in a day, particularly when hard-pressed; then see what is carried off from volcanic mountains throughout the world. An immense weight is carried off in smoke: I say weight because it is not imponderable, but expanded, so as to become lighter than the surrounding atmosphere, whereby it is caused to ascend. Now, I ask reflecting men, what becomes of it? Do they suppose it to soar beyond the sky, and aid the distant worlds? If so, the earth, constantly decreasing in weight, would move in a spiral course, according to her gravitation. Such is not the case; therefore all rarefied bodies ascending by virtue of the atmosphere's greater density finds its equilibrium, and in its gradual course of condensation descends again to the earth, to support Nature in bringing forth her bounteous annual produce, which would not be the case if such products were carried off never to return. A portion of such products is constantly exhaled from every part of the earth, some from a great depth, others more or less shallow. If what is desseminated in one year is required to support Nature in the ensuing one, it leaves a wide field open for discussion, as to how this great requirement is kept up, and in what way it ascends from such depths and returns to them again. We need not mystify our thoughts with the earth's interior composition, which is unfathomable; enough that it is precisely what is required, and to attempt a description would be a mockery.

I now refer to what we generally suppose about limit, either to man's ascent on the mountain or descent into the earth. I take the level of the ocean shore, where man and beast and all vegetation thrive, as a starting-point. On ascending the first few hundred feet we find our delicious fruit gradually fall off; on ascending further we find the wheat diminishing, followed by the disappearance of the barley, and about two-thirds of the trees: oats, heath, and scrub bushes of a hardier class may be found a few hundred feet higher; ultimately we find nothing but a barren quartzose mountain, on which man may continue awhile. He may even ascend to an equal height in a balloon, but at such heights he will not remain long. Why? He is out of his element. To thrive he must breathe an atmosphere containing a certain proportion of oxygen, which quantity is necessary to supply that used at each preceding respiration in renewing the blood, which supply if not kept up is certain to be injurious to the constitution. So it is with all classes of animals and vegetation; the surrounding atmosphere must contain oxygen in quantity proportionate to their wants, or they will not thrive. Witness two trees, if one rubs the other the weaker one withers and dies; man and beast do the same, and even the grass of the field is governed by the same law.

I will next refer to the world in which we live. Is it now as when first formed by Nature, with ores of all descriptions where they were then deposited? Or was it first a fiery meteor (as now often seen gliding through the skies), having since gradually cooled down to its present temperature, with a crust (as plutonists say) some thirty or forty miles in thickness, enclosing liquid fire? My friends of plutonic theory will excuse me when I say I have never in all my experience witnessed anything to warrant one in arriving at such a conclusion. In taking a more theoretical view, I see no necessity for such heat to exist there. Heat for all the earth's purposes appears to be generated when and where required. We must bear in mind the earth does its work slowly and systematically. All Practicals are now aware that great heat is not necessary to produce native metals, quartz, or carbonates of lead, or even crystals of tin; such substances are formed under a slow, cold process. I say slow, yet it is not so slow as many would imagine, when hexagonal quartz is found to grow in only a few months.

Having expressed my views on the cause and effect of changes that take place in more or less elevated positions, I will now, with the ocean shore, as before, for a starting-point, submit my experience of what is found below it, and which appears to be governed by a law similar to that above. On first descending into the earth we find lead, antimony, iron, tin, gold, silver, copper, mercury, sulphur, arsenic, and, in fact, all the ores

known to man. As we continue to descend we find them gradually disappearing; on arriving about 300 fms. below the sea we find the lodes becoming a dense siliceous substance, analagous or similar to the mountain top. Under certain peculiar circumstances a solitary mine may be found with a short bunch of ore still extending downward; this can only be compared to the more sheltered spot on the mountain side. Most people, after reading books published by the plutonians, entertain their views, that all metallic substances settle down according to the law of gravitation. Dr. Collier goes so far as to say there are ponderous metals, unknown to man, below the gold-bands. I may be asked why I entertain the views I have expressed, of the ores becoming extinct in depth? My answer is, for the same reason that vegetation becomes extinct on ascending. All ores must receive their required proportion of oxygen to form and grow to perfection (as I am satisfied that all things grow), and some description of rocks contain more oxygen than others, such oxygen being carried down by water, lodes, and cross lodes at some points much deeper than at others. I believe all ores to be in a gaseous or aqueous solution, passing through the lodes and surrounding rocks until it finds oxygen and other substances to combine with, causing it to crystallise and become fixed. I shall return to these metallic substances again in my remarks on rock and lode formations. I before noticed that all high mountains are capped with barren rock, the chief component part of which is silica or lime; and when we turn to the interior of the earth we find it much the same. If, as we are told, granite is the primitive rock, we have strong proof that the interior is siliceous rock. Our highest mountains and deepest mines are each found to be siliceous, with all the other known rocks in the intermediate space; thus the bottom of our mines at 1000 fms. deep may be compared to our barren hills of corresponding height. I would not for a moment enter into a theoretical discussion as to how or when these rocks were first formed; but I feel persuaded, from long practical and watchful experience, that all rocks bear analogy to the rest of creation,—they live, grow to maturity, sow their seed, wither and die. Floors are formed by acids decomposing the old rocks, on which the young feed; hence it is we find the unaccounted-for faults and layers of rock, some being nearly all fossils, whilst the adjoining bed is without any. I have seen beds or layers of shells 2 ft. thick between layers of hard rock; here the rock had undergone a change, whilst the shells, being of a different substance, would not dissolve in the same time the rock had. NICHOLAS ENNOR.

Sept. 10.

MINING IN FLINTSHIRE.

SIR,—On leaving the Talargoch, and proceeding southward, the "Terfin Level," or as it has more recently been termed, the Nant-y-mwyn Mines, next claims attention. This extensive sett has for years been held by a few influential gentlemen, chiefly resident in the locality, many of whom have inherited the right from their predecessors, and who, from a well-studied knowledge of the district, have realised great wealth. Whilst noticing this I may remark, what certainly does not appear to be publicly known, that the rich mines which have yielded for so long a period have been held by such, and private companies; precluding hitherto the introduction of public companies into the most desirable channels of speculation. On entering upon the property, first having become well acquainted as to the Talargoch vein traversing the entire length of the ground (upwards of 400 yards), almost the first idea which would naturally strike the miner is one of a little perplexity, arising from the knowledge that this great vein has never been prosecuted within this boundary. Upon a careful inspection, however, the cause becomes more reconcilable. The measures, and, indeed, the whole of the features here, are precisely those of its brother mine, equally gigantic in proportion, and carrying all the transverse sectional veins into its capacious receptacle; there, however, exists a formidable barrier to its hidden treasures. In addition to the almost deluging streams of water issuing from the western cross-courses, and percolating through the measures, causing a seriously heavy amount of expensive drainage, the vein eastward is covered to a great depth by a conglomerated matting of accumulated boulders of rock and gravel, thickly encased in a matrix of sand and clay, partially decomposed, and the discarded wreck of the adjacent superstructure, always found a most troublesome antagonist to engineering perseverance, frequently tiring the patience of the bold, and gradually lessening the ardour of the tried speculator. With these observations, therefore, I must submit there can be but little doubt that within this capacious receptacle lie hidden treasures, destined one day to play a prominent part in mining enterprise.

It may reasonably be asked, why has this extensive mineral property remained so long unexplored? Some of the reasons I have already adduced. Upwards of 18,000*l.* have been already expended by the present proprietors, and becoming, as I presume, somewhat concerned at the heavy outlay incurred, they were ultimately content to offer the concern for a public company, reserving for themselves the moderate (?) sum of 10,000*l.* Already it was stated 18,000*l.* had been expended in explorations, thus giving them (the public company, of course) the benefit of 8000*l.* (very considerately, no doubt). It is far from my intention to disparage this very valuable sett, of which all practical miners must hold a favourable impression; but I do venture to say, notwithstanding my conviction that a sufficient outlay even on these exorbitant terms would be profusely remunerative, that the expenditure of this large sum over a series of years, being made expressly with a view to open discoveries (in a manner, by the by, that I should professionally term injudicious), with the by-gone chance of enriching themselves, and then to expect the public to pay for and participate in their blunders, is more than even John Bull can sustain with equanimity; and my best advice to these gentlemen is, that unless they are desirous of handing down their fund of wealth to posterity, they should cordially invite the present generation to share their speculation upon moderate terms. Under any chances a very great outlay will necessarily have to be provided before good results can be expected; and although a considerable amount of work has been done in sinking shafts and driving the adit level, which will be available to a coming-in party, it would, I think, be unsafe to calculate upon a less amount than 15,000*l.* to bring the concern into actual profits. To the west of this mine and the Talargoch I would forewarn any speculation, for reasons which I will explain when I arrive at the first mine that I shall denounce; as, however, I am not aware of any reckless trials up to this point, I will proceed to the next mine to the south (the Talacre), of which I hope in my next to furnish some interesting details. —— A FLINTSHIRE MINER.

THE NORTH HAFOD SILVER-LEAD MINES.

SIR,—I have been favoured with a prospectus of the North Hafod Silver-lead Mines, with a map of the district, corrected by Capt. Matthew Francis from the Ordnance Survey. As I am interested in the mining of Cardiganshire, and may possibly subscribe for shares in the concern, I should be glad of some information touching the map, which at present I do not understand. The explanation I seek will also be of service to many others, who, like myself, have been accustomed to rely upon the very excellent Ordnance Maps.

In Capt. Francis's map, now before me, there are four pink belts, running parallel south-east by south and north-west by west, which this sentence applies to:—"The pink colouring on the map indicates the meridian belts of metallic rock, and shows their influence upon the lodes." This is not explicit enough; and I am sure Capt. Francis will tell me and the public what is meant by it. Mr. Warington Smyth, speaking of the mining districts of Cardiganshire and Montgomeryshire, says:—"A portion of the two counties being thus divided off from the rest, it will be found, when the complexity of ever-varying inclination and strongly-developed cleavage have been overcome by patient labour, as appears by Prof. Ramsay's horizontal sections across South Wales, that the whole width of our district is constituted by a succession of rolls or undulations of what may in the main be termed the same series of beds, varying in lithological character from a soft shale, through many varieties of slate, flag, and argillaceous rock, to a coarse gritstone and conglomerate. The zones of productive mines will be parallel to the axes of these undulations; and by imagining lines of division to run in the same direction, south by west to north by east, we may obtain six groups, which exhibit in some respects distinctive characters." ("Memoirs of the Geological Survey in Great Britain," vol. ii., p. 657.)

It will thus be seen that Mr. Smyth and Capt. Francis are at issue. If the mineral-bearing strata (argillaceous rocks) run south by west to north by east, what becomes of Capt. Francis's pink zones? The difference is marked. I also find on the Ordnance Map, geologically coloured, that the bands of argillaceous rocks run south by west and north by east. My object is, however, not to argue, but to elicit information; and I should feel obliged if you will permit this letter to appear, and also the answer which I trust Capt. Francis will give to the public through the *Mining Journal*. C. T.

Carmarthen, Sept. 9.

THE DOLGELLY MINING DISTRICT.

SIR,—As one who has recently returned from a visit to this district, I read with interest your correspondent's letter in your last Journal, but must beg to differ from him in reference to his remarks upon "Glaster" (properly "Glasdir") Copper Mine. I carefully examined this mine, and was favoured with an account of its receipts and expenditure from the commencement. The operations extend over a period of nearly seven years, and during that time the returns have exceeded the expenditure by about 1500*l.*, which, although gratifying, can scarcely be pronounced a "great success." Your correspondent states "the ore is of poor quality." Considering that it has uniformly realised about 7 per cent. it cannot be termed "poor." He further states, "no lode can be seen," &c. I distinctly traced the footwall of the lode in the deepest winze sinking below adit (down about 20 yards), and although the bottom of this winze is about 4 yards wide, the other wall has not yet been reached. I have no doubt it will prove in depth a well-defined lode. The present workings are certainly remarkable, presenting a huge grotto-like appearance. Your correspondent has omitted mention of the auriferous quartz vein which was intersected in the winze alluded to above, from which I have some good specimens of visible gold, and which I have well tested; but the proprietors have preferred the substance to the shadow, and for the present leave the gold question in abeyance, particularly as arrangements are pending for an early reversion of the property to the hands of other parties. The mine is about four miles north of the town of Dolgelly, and some miles east from Clogau.

I visited the very interesting mine of Clogau when in the neighbourhood, and was shown over the workings and machinery. Should the lode continue as rich as when I saw it, it will not only "astonish the natives," but amongst our colonial brethren create no small degree of astonishment. The article in last week's *Saturday Review*, delineated to this mine, is nicely descriptive; but there is a vein of scepticism running through it, which the facts resulting from the discovery certainly do not warrant. The lode can be traced on the surface for a considerable distance, and in my humble opinion there is no reason to doubt that the energetic proprietors will enjoy increasing and continuous good success.—*Liverpool, Sept.* 10. —— C. D. B.

WHEAL LUDCOTT.

SIR,—Whatever can be the cause of shares in this mine selling at such a low rate? The present price is 3*l.* a share, each share paying 16*s.* in dividends yearly. Why this is actually less than four years' purchase! Often have I heard the remark that "there is no reason in mining," and here is a proof of it. I have been a shareholder in Ludcott ever since it first commenced paying dividends, and well do I remember the remark when it paid its first dividend—"It is the first it has paid, and it will be the last." A similar cry has been raised ever since, after every meeting, yet it still pays, and there is every probability of its continuing to pay for many, many years to come. I am wrong in saying it has continued its 4*s.* dividends quarterly ever since it first commenced paying dividends, as it certainly failed one quarter, *and only one*. Shareholders, of course, know the reason why, but others may not; I will, therefore, explain why it was. The cause was accidents to the machinery, which threw them back several weeks, and not, as it was reported, from any failing off in the mine. When those accidents were remedied the usual 4*s.* dividend was resumed, and in about three weeks another 4*s.* dividend will be declared. Does this look as if the mine was falling off? Now, if we are to believe the captain's late reports of the productiveness of the mine (and we surely have no reason to disbelieve them), Wheal Ludcott is not only as rich as it was when it commenced paying dividends, *but considerably richer*. It is true the silver-lead ore has not made such a high price lately as it did six months ago, but the reason of this is well known—*lead ores being not worth so much by 15 or 20 per cent.* Precisely the same objection may be made to the queen of Cornish lead mines—Herodsfoot, as also to Wheal Mary Ann, Trelawny, Cargoll, and all the Welsh lead mines. When lead advances Ludcott ores will make their usual prices.

Let my readers note the following remark, and ponder over it:—The low price of lead will interfere with the dividends of nearly every lead mine in Cornwall and Wales, *not with Wheal Ludcott*. The usual 4*s.* dividend will be declared, and if I am not greatly deceived some hundreds of pounds will be added to the balance in hand. See Capt. Knapp's last report of Ludcott. Are 3 tons of silver ore nothing?

I will conclude by advising my readers to do as I have done—lay out every pound they can spare in Wheal Ludcott shares at the present price. I have lately bought nearly 100 shares, and before I sell them again I hope to see them at 5*l.* or 6*l.* a share.

Sept. 11. —— AN OLD SPECULATOR IN MINES.

NORTH DOWNS WHEAL ROSE.

SIR,—May I enquire what is doing at this mine, and why it is that the property is idle, and so much depreciated, whilst its neighbours are so active and prosperous? I have heard it whispered that it is owing to the non-payment of calls by some of the heaviest shareholders; if so, why should the property of those who do pay suffer? Surely the power that created can enforce the call; the law for the Cost-book System must be effective, or the mines under that management must go down if not remunerative. I presume the Stannary law, as well as the common law of Cornwall, is in force in England, Ireland, and Scotland alike; I speak particularly of the latter, as several non-payers screen themselves under the idea that in a Scotch court no verdict would be given against them. May I enquire if calls made by pursers of mines in Cornwall cannot be recovered from adventurers resident in Scotland; and if not, why not?

Truro, Sept. 9. —— CORNUBIENSIS.

EAST WHEAL JANE MINING COMPANY.

SIR,—One of the most extraordinary schemes for working a mine under the Cost-book System ever projected is that under the above name; and it is only to make the following extract from the prospectus, which is for "private circulation," to show its nature:—"The undertaking is divided into 32 parts of 200*l.* each, representing a capital of 6400*l.*, out of which 3600*l.* cash will be paid for the lease, plant, and work done on the mine, and 359 shares free out of 6144, which the mine is to be divided into at a meeting of the holders of the 32d parts, which is valued at 5*l.* per share, making each 32d or 200*l.* part worth about 900*l.*, leaving a working capital of 2800*l.*, which is sufficient to sink the mine to the depth mentioned in the reports; 120*l.* for each 32d part to be paid forthwith, and the balance as required."

The novelty of the scheme convinced me that the projectors could have had but limited experience in the mining world; indeed, totally ignorant of human nature, to suppose that any business-man who possessed 200*l.* would join in such a measure. Let that man who may entertain the proposition first go into the county, take with him any of the many respectable agents about Liskeard, and, acting upon advice, he will for the total expense of 5*l.* save probably 500*l.* I say nothing about the mine; but making use of the mine for such an ingenious means of obtaining money is a matter of serious comment.

Sept. 12. —— ONE OF THE INVITED.

THE SOUTH FRANCES AND WEST BASSET BOUNDARY QUESTION.

SIR,—The correspondent who, in last week's Journal, speaks of this disputed boundary is evidently a partizan of South Frances adventurers, for he throws all the blame on West Basset Company, as though they alone were at fault. He says that "the persistence of the few compels the West Basset adventurers to incur continued and enormous expenses." How does he know that a few only of that company are in favour of proceedings for what they believe to be their right? The fact that such proceedings have been sanctioned at a general meeting seems to argue the reverse. I believe that West Basset adventurers are entitled to the ground in dispute, and I know as much about the facts as your correspondent does — perhaps more; and it is very likely that the House of Lords will give its decision in their favour. Anyone who knows all the facts, besides the blotched old plan on the lease of 1835, on which no reliance should be placed, but on which an old judge did put too much reliance, must clearly perceive that South Frances Company have no right to go to the north-east corner of Vincent's House. When all the facts were submitted to a Cornish jury, they gave a verdict in favour of West Basset—that was at the second trial. At the first trial West Basset put in no evidence at all, and, therefore, lost. The judges who reversed the second verdict were apparently influence by their erring brother who first heard the case.

London, Sept. 12. —— AN ACCURATE OBSERVER.

SOUTH WHEAL FRANCES AND WEST WHEAL BASSET.

SIR,—Being one of the "few" who do not think that "the South Frances adventurers have right on their side," I cannot allow the observations of your correspondent, nor those attributed to Mr. Broad, to pass entirely unnoticed, as they are calculated to mislead the adventurers of both mines and the public in general. I most positively assure them that the appeal in the House of Lords is not the cause of the delay in the assessment of damages in the first action, nor are the committee of West Basset responsible for the enormous legal expenses of the suit. Before one shilling was spent in law, the West Basset committee offered to compromise the matter in dispute upon the most honourable terms—to adopt the middle line suggested by Mr. Marriott, and to waive all claim to ores inadvertently extracted by South Frances north of the south line, which by their own showing were considerably more than under any circumstances they dared to claim, they having paid into Court, in the second action, 525*l.* for damages north of the north line. The committee of South Frances rejected this very advantageous offer, and preferred bringing an action at law against the West Basset committee. South Frances having thus commenced legal proceedings, should have enough of it, if I had a voice in the matter; and I only hope the West Basset committee will continue their "persistance" to a finality. —— "AUDI ALTERAM PARTEM."

MINE LEASES.

SIR,—In a letter headed "A Liberal Landlord," inserted a few weeks ago in the Journal, reference was made to the charges for leases of mines. I concur with the writer's opinion, that the charges are disgracefully high, and much higher now than before the stamps were reduced several pounds on each lease. It was said soon after the leather tax was remitted that all the benefit was the tanners, for immediately thereafter the price of leather advanced. As all lords of mines have their lawyers, who are their conveyancers, lessees are in their hands, and are to pay just what the lawyers are pleased to charge. There is only one way that I see in which this imposition on capital and industry can be rectified, and that is by petitioning the lords to enforce on their stewards a more moderate scale of charges. I consider 10*l.* is a charge amply sufficient for one lease and counterpart, whereas the present charge varies from 26*l.* to 30*l.*, and sometimes is near 50*l.* In mines where there are many lords, and each lord grants a distinct lease, the charges on the companies become quite oppressive. I recommend that the great landowners of Cornwall—Lord Falmouth, Mr. Basset, Mr. Robartes, Lord Clinton, and others—be petitioned on the subject; I think it will not be in vain. They will see the justice of answering the prayer of miners who lay out so much money in developing the hidden resources of their estates.—*Plymouth, Sept.* 11. JUSTICE.

LEAD MINING IN CORNWALL—NEW DISTRICTS.

SIR,—In the Journal for the last two weeks I observed favourable reports of Wheal Sicily, situate in the parish of Broadoak, Cornwall. It may be in the recollection of some of your readers that in years gone by I did my utmost to call public attention to this part of the county. My predictions are, that if this district be explored it will be found to be second to none in the county of Cornwall. There are a great many north and south lodes in this place, traversing a beautiful bottom for some miles in length, and many east and west courses, all producing silver-lead ores. The rock formation generally prevailing through this district is a mineralised light blue clay-slate killas, such as surrounds the richest lead lodes in the county. Presuming that the Wheal Sicily Company will find a great deal of silver-lead ores in the lode they are exploring, I venture to say they have a lode east of their present workings, not far off the wheels, that if explored to a proper depth will be found to produce large quantities of mineral. I speak from practical experience, having some time back driven an adit level on the course of the lode referred to, some 50 fathoms in length; it is a regular, well-defined lode, varying from 1 to 3 feet wide, and is composed of some of the richest-looking gossan, quite metalliferous in its character, containing silver visible to the eye in breaking the lode, some copper, and a great deal of soft transparent quartz. I venture to say that this lode will pay for working below the adit level for the silver it contains, and soon produce a large quantity of rich silver-lead ore. I have great confidence in this lode, having explored it to some extent in the adjoining sett the other side of the river, in the Wheal Jane sett, where it produced a great deal of lead ore, in a large gossan in some places, all of 6 feet wide. We drove an adit level on this side of the water full 90 fathoms, sunk a shaft 13 fathoms below that level on the course of the lode, and it produced lead and silver ores all the way in sinking; at the bottom of this shaft the lode is more compact, and will produce more lead than at any other place in the sett. It produces some fine copper too; this is likely to proceed from a very large copper lode traversing the sett south of the shaft. This copper lode crosses the bottom up to a shaft that was put down 25 fathoms deep some 25 years back, where this lode was cross-cut, and found to be 6 ft. wide, composed of quartz, peach, mundic, and some fine stones of copper. The opinion of practical men was that this lode would produce large quantities of copper at a deeper level; I have seen solid stones of copper taken from it just opposite the Wheal Jane engine-shaft. I fully believe from the character of the lead lode in that direction that the copper lode will be a very valuable prize to the shareholders. This sett and the Wheal Sicily I place great confidence in, as well as many others in the same parishes. Adjoining Wheal Sicily east are several large lead lodes crossing. One in particular strikes the attention of those that know such a lode exists; this lode was intersected west of Tempasin's engine-shaft, in the 25 fathom level, by driving on the copper lode referred to above. This lead lode was found to be 4 feet wide, composed of soft quartz, flookan, and lead. Very little, if any, attention was paid to lead in those days, it being of but little value; I believe this to be the same lode as that in the Carn Vivian Mine, which is about a mile from this place. I have seen the lode in Carn Vivian, and it is a fine one. Whether the last mine referred to be or not too close to the granite to produce much lead is not for me to say, but this I say, I prefer valleys for lead to high hills close upon the granite, and would advise parties desirous to obtain good silver-lead mines to try the ground both sides of the River Fowey, in the parishes of Broadoak, Cardinham, and Warleggan.

I will now go back to the first two lodes here alluded to. I have traced these south for a considerable distance—upwards of three miles, and find them to contain silver-lead ores all the distance in places. At the southern point of intersection one of them is found to be a good course of lead; this is in the Boconnoc Park, which will not be explored, as no grant can be obtained. But there is a great length of ground between that is likely to produce very large quantities of mineral if explored. There is a sett taken up adjoining the Wheal Sicily by Messrs. Codd and Sennett, of Plymouth, the same lodes crossing this sett as are in the Wheal Sicily, which can be proved by driving adit levels on them from the north side of the sett. These lodes have been opened in the South Sicily sett in places, and found to produce lead ores. Whatever riches may be discovered in the Sicily sett, the same results may be expected to be realised by working the South Sicily, and very likely a great deal will be found by driving the adit levels. A very moderate outlay will suffice to prove this valuable piece of mineral ground. I think that success might be relied on by exploring this part of the country, from what has already appeared. The rubbish in the bottoms, for upwards of three miles, has been turned over in places by the tin streamers, and lead and copper in all places have been found amongst it; and if we go north or south we find lead and copper in the lodes, for miles. There appears to be a prejudice existing in the minds of the public against a new district, but it should be understood that all mining districts were new at one time. Speculators sometimes have wrong notions on this subject, and fancy that they are sure to be right if they can obtain a sett, or shares in a sett, near a very rich mine, and they will invest into anything that is brought before the public, whatever the fleecing party or parties may ask them for it; and some have the daring to bring anything before the public, although they know there is but little chance, if any, of meeting with sufficient minerals to pay even anything. They tramp up a prospectus, saying that the lodes are one and the same as such and such a mine or mines, and, although there has been some 30,000*l.* or 40,000*l.* spent in exploring the ground, the company never worked in the right place, or on the right lode. Of course a moderate sum is all that is asked from the public for the sett or setts, say 7000*l.* This is to go into the pockets of the fortunate finders of the great speculation, which will take at least 20,000*l.* more to bring it into a paying state, if ever it pays profit. When will the mining speculator learn wisdom from what has past?

London, Sept. 12. JOHN SEYMOUR.

LONG RAKE MINE—SPECIAL REPORT.

The subjoined report of this mine, by Messrs. Phillips and Darlington, has been handed to us by a shareholder. It is gratifying to the spirited proprietary, and to their able chief, Mr. Dunsford, to have thus met with such a prize in so brief a space of time:—

Sept. 7.—This property is situated upon the Halkin Mountain, from 3 to 4 miles distant from the town of Holywell. The district is one which has yielded very large quantities of lead ore at a comparatively shallow depth. Several veins are stated to exist in the sett, among which may be noticed the Long Rake, Old Rake, Dog-pit, Chwarelas, Cheney, Graigvaboc, Gallop Ell. Operations are being conducted on the Long Rake vein, which is well defined and strongly mineralised, and which courses in an east and west direction. An engine-shaft has been sunk vertically 48 fms. from surface, and is expected to pass through the vein on sinking 4 or 5 fms. deeper. The 48 fm. level is advanced some distance east and west of the engine-shaft; the ground above this point has, however, been chiefly exhausted by former workers, who raised considerably quantities of ore during their operations. The 48 east is now entering a run of unexplored ground, and the lode in the present forebreast is of more than its average width, composed chiefly of carbonate of lime, with some large stones of lead ore, probably yielding nearly 1 ton per fm. In the western level the vein is scarcely so compact, but presents a very favourable appearance. On the dressing-floors we observed a pile of excellent ore, which is being prepared for the market. All the work executed has been judiciously done; the shaft is of good size, whilst the engine and pumpwork are both substantial and effective. We were also glad to observe that the expenditure appears to be carefully and economically applied; moreover, we entirely concur in the proposed plan of pushing down the engine-shaft as speedily as possible, and opening out new ground in depth. A vigorous trial in this direction is what the vein fully deserves, and if it be opened out extensively we are of opinion that steady and satisfactory returns of ore will be secured.

GREAT WHEAL MARTHA—SPECIAL REPORT.

Capt. Joseph Richards having been instructed to inspect this mine for a shareholder, has forwarded the following report. The proprietor has sent it to us for the information of his co-partners, and congratulates them on the prospects of the mine:—

Sept. 11.—In a central part of the sett is a perpendicular engine-shaft of good size, now in course of sinking below the 40; it is expected that the shaft will reach a point deep enough for the next level (the 50), and the lode be intersected at this increased depth in about three months hence. From the engine-shaft in the 40 a cross-cut of about 18 fms. reached the lode; this level has been driven altogether about 40 fms. west, and the same distance east. I believe the main part of the lode here to have been left standing for the most part of the distance to the south of the level, and which proves to be the case both east and west about 20 fms. in each direction from the shaft, where a cross-cut intersected the main part. At these points it is laid open of large size—9 to 12 ft. wide and of very good appearance, being also productive and valuable to the extent of from 20*l.* to 25*l.* per fathom, with ground of easy nature for exploration. The lode, therefore, may be fairly considered to be one that deserves the most effectual trial possible, with every probable chance of its becoming still more valuable in the 50, to which point, I am glad to see, you are hastening with all speed. I may here, perhaps, observe that the lode in the present end, east in the 40, having just passed through a cross-course, is at present comparatively poor, but will, in all probability, as the level is extended east, again become of equal promise and value as before the intersection alluded to. The lode also in the present western end of the level is at present small and poor. I consider these changes, however, only of a temporary nature, and occurs in all mines to a more or less degree. The 30 drivage is on the north part of the lode, so far east as Thomas's shaft, to which there has been lately effected a communication, which will much facilitate the removal of the stuff, and prove also of advantage for ventilation, &c. The western driving here also seems to be principally on the north part of the lode, which, however, in the present end is in disordered state. It is more than probable that on cutting into the lode at different points in this level it will be found productive and valuable. The 20 is communicated to the 30 by a rise therefrom, and is extended about 20 fms. east and 60 fms. west thereof. In the 20 end west a cross-cut has been put out north, and cut the orey part of the lode, which is of very great encouragement, and proves itself to be valuable to the extent of 3 to 4 tons of copper ore of medium quality per fathom. The 20 east is communicated with Thomas's shaft, where the lode is of very great size and promise; in the back of this level is orey ground, that is being worked at a tribute of 8*s.* 6*d.* in 1*l.* Taking into consideration the very great size of the lode throughout the different levels, with its generally productive character, I am of opinion that this mine deserves a thoroughly efficient trial. The lode throughout the mine shows a very fine character indeed, being composed chiefly of capel, mundic, and copper ore in large quantities; and, as it is a champion lode of the district, it will in its progress and extension eastward, not only pass through this, but the adjoining mine of East Martha, where there can be no reason whatever to doubt its running through the entire length of that sett; and intersected, as it is there, with two very fine cross-courses, I am of opinion that it will prove a very valuable lode indeed. You have large quantities of orey ground in Great Wheal Martha, some of which is being now worked at a tribute of 8*s.* 6*d.* in 1*l.*; and when your surface and preliminary expenses for engines, of which there are two—a 50-in. pumping one and a drawing and crushing-engine, &c.—are ended, and with proper energy and economy in the development of the mine, and the lode proves valuable to a good extent in the 50, when reached, I do not see any reason to doubt that it will become a good dividend-paying mine.

Meetings of Mining Companies.

UNITED MINES (TAVISTOCK) COMPANY.

An ordinary general meeting of shareholders was held at the company's offices, Anatinfriars, on Thursday, Mr. J. A. BUCKLAND in the chair.

Mr. E. KING (the secretary) read the notice convening the meeting, and the minutes of the last were read and confirmed. The accounts showed—

Balance last audit	£220	15	7		
March mine cost, merchants' bills, &c.	173	14	4		
April ditto	204	0	9		
May ditto	192	1	1		
June ditto	225	10	1	= £1016	1 10
Call	£313	16	0		
Tin sold	185	6	5	= 499	2 5
Leaving debit balance				£ 516	19 5

The report of the agent was then read, as follows:—

Sept. 9.—Since your last general meeting the following operations have been carried out:—The cross-cut in the 60, then commenced, has been continued south 4 fathoms 3 feet, the lodes intersected 17 fms. 3 ft., driven east—the first 12 fms. 3 ft. through unproductive ground, the last 5 fathoms on the course of the lode, which has produced some very good work for tin, although not yet far enough east to be rich. The lode in the present end is about 14 in. wide, good stamps' work. This level has also been extended west 6 fms. 3 ft. on the course of the lode, varying from 4 to 6 ft. wide, which throughout the drivage has presented a most kindly appearance, and produced very low quality tinstuff; last Wednesday, however, a good spot of tin was discovered, which has been spreading over the end ever since, it is now 4½ feet high by 2 feet wide, and worth 20*l.* per fathom. When it is all over the end it will be worth 30*l.* per fm.; it is now being forced by a full pare of six men, at 5*l.* per fathom. Bearers, cistern, standing lift, &c., have been fixed in the 60, sinking resumed, and the shaft sunk 12 fms. through a most congenial stratum for the production of mineral. We may now boast of having a thorough good shaft and pitwork in full operation to the 72. The shaftmen are now engaged driving a cross-cut south to cut the lodes in this level; this, like that in the 60, is being carried 8 feet wide by 7½ feet high, as it has also to answer for a plat—price 5*l.* 5*s.* per fathom. I calculate the distance to be about 5 fms., and will be driven in about four weeks from this date. A winze sunk from the bottom of the 48 to the back of the 60, but it is not holed, as the end is not forth by about 9 feet. The lode in this winze maintained its regular course and value for the first 4 or 5 fathoms sinking, then it appeared thrown out of its place, and disordered by an unusual warp in the elvans, and although we carried the winze 11 or 12 feet wide we could not find a satisfactory wall; we then went on upon what should be the course of the lode, and found it in a disordered state, but from a conviction that more lodes exist in the north, I have since the winze is down put the men to shut in there, and by so doing another portion of it, about 1 ft. wide, has been discovered, producing good work. At present there is in the bottom of the winze a lode 2 feet wide, although split in two parts, each worth about 10*l.* per fathom. There can be but little doubt of its continuing up to where the disorder first appeared, and where the lode is worth 35*l.* per fathom; this, however, will be proved forthwith, as we purpose to continue working this back by four men on tribute, until the 60 end is further advanced, and then increase the number. Only 5 fms. 4 ft. 5 in. have been driven on the eastern cross-course, in the 18, in search of lead; as the indications were only of an ordinary class, and the men were wanted elsewhere, it is suspended. Ground driven in the four months 34 fms. 1 ft. 5 in.; ground sunk in the shaft and winze 23 fathoms: making a total of 57 fms. 1 ft. 5 in. The present prospects of the mine I consider fair, as the 60 east and west are producing tin, and the eastern end still 19 fms. 3 feet from the cross-course (if it continues its underlie), just the length of the best tin ground in the 48 fm. level. The shaft down to the 72, and the lode may be expected to be cut in four weeks; if cut as good as I expect it will be, judging from the 48 and 60, we shall have good supplies for the stamps. It is a very difficult matter, under the circumstances, to say how much tin can be sold during the next four months, seeing the points in the 60 are no further developed, the lode in the 72 not yet seen, and nothing, of course, can be expected from it east, as it will require time to drive the cross-cut and get it up, where productive ground may be expected. I am confident, however, that a good lode exists in the bottom of the 48, and in the 60 west, from whence I mean to have a supply, and, therefore, I think I am pretty safe in saying 11 or 12 tons of tin may be sold during the next four months, although we have only water at present to drive four heads of stamps, and some four or five weeks will pass away before the 60 east will be far enough advanced to admit a pare of men to stope the back. I would recommend the 60 being forced both east and west by a full pare of six men in each end, also the 72 east and west by full pares, but should the lode cut good west in this level I would advise you to resume sinking at once. A winze must be sunk from the 60 to the 72 as soon as the 60 is drained. The backs in the 60 east and west will be taken away as best we can. We have now employed underground and at the surface 42 persons. Our engine, pitwork, &c., are working well.—J. TUCKER.

The CHAIRMAN having moved the adoption of the report and accounts,

Mr. WATKIN stated that from the report just read he thought they were justified in considering the mine to be in a far more satisfactory position than it had been for some considerable time past. It had always been his conviction, from the reports received from the mine, that had the development of the property been prosecuted with vigour it would have been long since a dividend-paying mine. He had known 7 or 8 tons of tin to be sold monthly, and produced at a, comparatively speaking, small cost, but their great drawback had always been having but one level open at a time. He saw that the shaft was now down to the 72, and the whole of the ground standing between that level and the 48, and he thought they might look forward with confidence to profits being realised. He did hope that the committee would at the present meeting make a call sufficient to pay off all outstanding liabilities, and trusted no further call would be required.

The CHAIRMAN said he quite agreed with the remarks just made. He considered that since the management of the company's affairs had been placed in the office of the present secretary the operations had been prosecuted with vigour. It was the first time since he had been in mining that he had ever heard of a sump-shaft being sunk 24 fms. in eight months, which had been the case at their mine. He looked forward to the 72 opening out a fine course of tin, and he thought they had every reason to believe, from the discovery that had taken place in the 60 west, that the mine would soon be placed in a good position.

The SECRETARY said that, after having investigated the character and quantity of the returns taken from the upper levels, he had taken a large interest in this mine. It appeared that a bunch of tin had been cut in the adit level, from which a great quan-

tity of tin had been raised. That same bunch had been discovered in each level down to the 48, in which level it had increased to 25 fathoms, in length. Although two years had elapsed since the shaft was sunk to the 48, yet the returns made from the back of that level had during that period paid the whole cost of the mine for two years. The shaft had been carried down to the 60, and the lode cut, and from the 60 to the 72, where a cross-cut was now being put out to intersect the lode, which the agent thought would take place in about a month. He might remark that the 60 end east was about coming under the bunch of tin discovered in the 48, and that at the bottom of the winze, a few feet from the end, the lode was worth 20*l.* per fathom, which clearly proved that from this point up to the cross-course—a distance of 20 or 25 fms.—a large deposit of tin would be found. In the 48 west the level had been extended some 40 fathoms, and not a particle of tin discovered, although the ground had been explored west. In the 60 a bunch of tin had just been cut, worth from 20*l.* to 30*l.* per fathom, and it was quite evident this level had just entered a fine lode for tin, as upon a reference to the plan it could be seen that the greater portion of the ground west had never been tested. He looked upon this as a most important discovery, and he believed a few fathoms would test its intrinsic worth. He might mention that Capt. Tucker had been very accurate in his estimates with regard to the cost of laying open two levels, and he quite concurred in his opinion as to the advisability of sinking the sump-shaft, when the lode had been intersected at the 72, and the ends driven a short distance east and west. The dry season had to a great extent rendered the water-stamps idle, but they could now look forward to a full supply of water. The present machinery, with a little alteration in the stamps-axles, would be adequate to the returning of 7 or 8 tons of tin per month. Everything was being pushed on at the mine to make it as speedily as possible remunerative to the proprietors, and reward them for their outlay.

The report and accounts were then received and adopted.

The CHAIRMAN said they had now to consider the financial position of the company. The accounts just passed showed that there was a debit balance of 500*l.* and 600*l.*, in addition to which they had to provide the current three months' cost, but what amount of call should be made was a matter to be left in the hands of the meeting.

Mr. M'CALLAN was of opinion that a call should be made sufficient to pay off the whole of the liabilities and leave a small balance to the good. If any further discoveries were made the ore ground now standing would pay for the development of the mine for months to come, but he thought there was good reason to believe that in the current quarter the discoveries already made would prove to be of great value. He proposed that a call of 5*s.* per share be made on the 3182 shares of the company.

A SHAREHOLDER stated that he had been connected with the company for some considerable period, and although he had no objection to the call proposed, yet he considered it a great pity that the mining operations had not been carried on with greater expedition. He believed that had their works always been pushed on with the same degree of energy that they had been during the past few months their mine would now be in the Dividend List.

Mr. BRIDGE having seconded the proposition made by Mr. M'Calian, a call of 5*s.* per share was made.

The committee of management were re-elected; when the meeting was made special for the purpose of considering the propriety of reissuing the 1982 shares held by the committee in trust. After some discussion it was resolved that the 1982 shares be distributed *pro rata* amongst the present shareholders.

Mr. RICHARDS had much pleasure in proposing a vote of thanks to the Chairman for his great and increasing attention to the affairs of the mine, and for his courteous conduct in the chair, which, being duly seconded, was put and carried unanimously.

The CHAIRMAN having acknowledged the compliment, the proceedings terminated.

CARADON CONSOLIDATED MINING COMPANY.

An ordinary general meeting of proprietors was held at the company's offices Austin-friars, on Wednesday, Mr. CARLEEN in the chair.

Mr. E. KING (the secretary) read the notice convening the meeting, and the minutes of the last were read and confirmed. The accounts to the end of June showed—

Call				£548	8 0
Balance last audit	£ 13	4	5		
April mine cost, merchants' bills, &c.	128	13	1		
May ditto	152	17	6		
June ditto	197	1	0=	491	16 0
Leaving credit balance				£ 56	12 0

The report of the agent, Capt. W. Rich, was read, as follows:—

Sept. 10.—Since your last general meeting the underground operations in the mine have been chiefly confined to the sinking of the engine-shaft, driving cross-cuts north and south, and sinking a winze in bottom of the 54 on the course of the lode. The shaft is down 63 fms. below surface, on the course of the lode diagonally. Although we cannot report any good discovery here yet, still the nature of the granite looks congenial for copper, and the lode in its composition is much the same as is often found in the adjoining mines when bordering on a course of ore; the sinking is being urged on by nine men as fast as possible, at the rate of about 2 fms. per month. The caunter lode, referred to in my former reports as likely to form a junction with this shaft lode, has not yet been seen in sinking, but, judging from its underlie, I am of opinion the point of intersection is not far distant. The winze in bottom of the 54 is down some 5 fms.; the lode in the first 2 or 3 fathoms sinking is large, and has produced good stones of ore; we have, however, met with the cross-course here, which has made the lode poor, but it still maintains a fair size, being 2 ft. wide; the ground here is easy of progress, the present price for sinking being 50*s.* per fm. The cross-cut south has been driven 16 fms. during the past three months, and two lodes intersected, within 5 fms. of each other, 2 ft. and 3¼ ft. wide, respectively; we have not yet opened on these lodes to prove them off the influence of the cross-course, because before doing so I deem it more advisable to push on the cross-cut some fathoms further to prove this part of your sett. The north cross-cut has also been extended about 16 fms. during the past quarter. Nothing of importance has been met with yet, except in driving the last fathom or two; we have had good stones of ore in the country near the cross-course, which looks kindly, and appears as if we are getting near a lode. I would, therefore, advise that this level be continued to the extent of the sett towards Craddock Moor, for, owing to the rise of the hill, we have full 60 fms. backs to operate on, if anything good should be discovered here. We have completed fixing the steam-whim, built boiler-house for same, erected poppet-heads, pulley-stands, &c. The mine is well provided with machinery both for pumping and winding, and the surface works very nearly finished. The expenditure in future will, therefore, be mostly confined to exploring the mine underground. We have also almost got over the dead work of cross-cutting, which will be completed in about two months, if the ground continues as at present; we shall then be in a position to open on the course of the lodes, to prove them away from the influence of the cross-course. I would advise that the sinking of the engine-shaft be forced on by nine men to a 70 fm. level, for I consider it very important that the shaft should be sunk as deep as possible before cutting plat and driving on the lodes. I would also recommend that the cross-cuts be forced on in the meantime, and to continue the sinking of the winze, with the view to ventilate the mine. I calculate the cost for August month will be 200*l.*, after that I consider 140*l.* to 150*l.* per month will be sufficient to cover the expenses.

The CHAIRMAN said that the committee, thinking it would be more satisfactory to shareholders, had requested Capt. Rich to be present at this meeting, in order to answer any questions, or furnish any information that shareholders might desire. By the explanations which Capt. Rich would render, it would be seen the mine at the present time possessed several points of interest, some, indeed, of the greatest prospective importance.

Capt. RICH, in answer to questions, stated that he would recommend the continuing of the cross-cuts north and south some 12 or 15 fms., and then open on the most promising lodes that had been cut away from the cross-courses. They would at the same time continue the sinking of the shaft with all possible speed to the 70 fm. level, when they would be in a position to open on the course of the lodes. They expected to meet with two or three important junctions in the 70 fm. level.

The SECRETARY said that if at the expiration of the coming three months no discoveries were made in the cross-cuts north and south, the men engaged upon those points of operation would be put to drive on the lodes cut in the cross-cut. From the nature of the ground, and the character of the lodes, they had every reason to believe that in the 70 satisfactory results would be realised, as eight or nine different lodes had been intersected by the north and south cross-cuts, most of them presenting an appearance that they would be productive at a deeper level. They were also justified in anticipating that when the caunter intersected the main lode between the present point and the 70 fm. level a great discovery would be made.

Capt. RICH, in answer to questions, stated that, as the caunter was dipping into the main lode, they had reason to hope that a junction would be formed before the 70 fathom level was reached.

Mr. BATTERS enquired the opinion of Capt. Rich with respect to the Menadue lode, as to whether it had yet been reached?—Capt. RICH replied that, as the Menadue lode was divided going west, it was quite likely they had cut its south branch.

Mr. BATTERS said that he had recently had the mine inspected, and the inspector had expressed an opinion that the Menadue lode had been cut, but he believed that there were several other important lodes to be intersected.

Capt. RICH thought the Menadue lode divided in West Caradon in the 17 fathom level; the character of the lode, when divided, was poor.

Mr. GODDARD stated that in Craddock Moor there was a very valuable lode near the Caradon Consols boundary. He wished to know if that lode had been seen in Caradon Consols?

Capt. RICH replied that in Caradon Consols they were sinking upon the same cross-course, and in parallel ground to that in which the lode in Craddock Moor was situated. At present the lodes were under the influence of the cross-courses, and would improve when they were further explored; indeed, several of the branches, when developed, might open up good lodes.

The SECRETARY, in answer to an enquiry, stated that the Craddock Moor sett was north of the Caradon Consols.

The CHAIRMAN enquired at what point, according to the bearings, would Vivian's lode be intersected?—Capt. RICH replied that Vivian's lode came up near to the Caradon Consols boundary. In Craddock Moor that lode was very valuable—indeed, it was the lode from which their principal returns were being made. If they did not cut that lode before their boundary was reached it would further west. The cross-cuts had been driven for 40*s.* per fathom, but in three months hence they would be finished.

The CHAIRMAN said that although those cross-cuts had incurred a large expenditure they would be, as it were, the future key to the mine, for they enabled them to ascertain the exact position and appearance of every lode and every branch, by which they knew how to operate at a deeper level.

The report was then received and adopted, and the accounts passed and allowed.

The SECRETARY said the committee had received a statement of the July labour cost and merchants' bills, which amounted to 269*l.* 11*s.* 4*d.*, and as the future cost would be about 200*l.* per month, the committee suggested that a call of 15*s.* per share should be made, which would be sufficient to meet all requirements, and leave a small balance to the credit of the account. The July cost and bills had been considerably increased by reason of the expense attending the building and other things in connection with the engine. Shareholders must bear in mind that the meetings were now quarterly, instead of two-monthly, and that though they had more work doing their calls were not increasing. The assistance that the new engine would render during the ensuing winter would be the means of very considerably diminishing the expenditure.

Mr. BIRDSEY, who had recently visited the mine, was much pleased with its general prospects. He had always entertained the most favourable opinion of the Caradon district, and fully believed that its wealth was yet but very imperfectly known. For shares to be selling at the price which Caradon Consols were, considering that the property was in the Caradon district, was to him perfectly anomalous.

Mr. BATTERS was speaking the sentiments of several shareholders, when he stated that the mine was being worked in the most efficient and economical manner. Seeing that their property was situated in the Caradon district, he fully confirmed the opinion that their shares were the cheapest in the market.

A call of 15*s.* per share was made.

Mr. WARRINGTON said that they should not separate without according to Capt. Rich the thanks of the shareholders for the efficient and economical manner in which he had prosecuted the development of the mine. He (Mr. Warrington) had recently had the mine inspected by two agents, one being a captain at East Basset, and the other a captain at South Caradon, both of whom gave it as their opinion that the mine could not be better or more economically managed.

Mr. TREGELLIS, although not a miner, could fully corroborate that opinion, and had much pleasure in seconding the resolution, which, being put, was carried unanimously.

Capt. RICH thanked the proprietors for their mark of confidence, and assured them that he had ever endeavoured to conduct the company's affairs at the mine with the utmost economy, consistent with efficiency, and that so long as he was entrusted with his present position he would do his utmost to merit a continuance of that confidence which the shareholders had just so kindly expressed.

A vote of thanks to the Chairman was passed, and the proceedings terminated.

LOWER TALDRWS SLATE COMPANY.

The first (adjourned) general meeting of proprietors was held at the London Tavern, on Saturday, Mr. P. A. MOORE in the chair.

The CHAIRMAN stated that he was sorry to again inform proprietors there were not sufficient present to form a quorum, and, therefore, the business which the present meeting had been convened to transact would have, according to the Act, to be further adjourned. As there must be a certain period between each general meeting, and as it was evident that it was of little use endeavouring to get a meeting during the present month, so far as he could at present gather, the opinion of himself and his colleagues upon the board was that powers should be taken to hold the general meeting in Dec. and June.

Mr. MOSS suggested that the present meeting should be adjourned to about the middle of October.—Mr. F. S. HEMMING endorsed the recommendation made by Mr. Moss, that the present meeting should be adjourned to October.

The CHAIRMAN assured the proprietors that the board would be glad to meet in any way the wishes of the shareholders.

Mr. F. S. HEMMING urged the desirability of directors doing their utmost to obtain a general meeting at the earliest opportunity, as it would be the more satisfactory to proprietors. He had himself recently visited the works, and he could assure his fellow-shareholders that the position and prospects of the property justified the assumption that their most sanguine expectations would be fully realised.

The CHAIRMAN was glad to hear such a favourable opinion expressed by Mr. Hemming, whom he knew had given considerable attention to the subject of slate and slate quarrying. With respect to the company's governing articles, he thought it quite probable the board would recommend that the next ordinary meeting should be made special, for the purpose of taking into consideration the advisability of reducing the number of shareholders necessary to form a quorum for the transaction of general business, the necessity for which, he thought, had been fully demonstrated.

Mr. MOSS enquired if there were any arrears on account of shares?—The CHAIRMAN replied that at the present moment there was not a shilling in arrear on account of shares—indeed, several shareholders had asked to be permitted to pay the full amount upon their shares. As regarded the quality of the slate which their property produced, it was satisfactory to know that an eminent practical authority had described it to be of the finest quality he had ever seen. They produced the large size slates known as "duchesses," and had never yet made a single slate of an inferior quality.

Mr. G. S. FULLER, C.E., the company's engineer, stated in answer to an enquiry that he could fully confirm the opinions that he had expressed in his report, which had been already perused by shareholders, and that the time it would take to bring the property into a dividend-paying state depended entirely upon the amount of capital expended.

The CHAIRMAN having thanked the shareholders for their attendance, the meeting was further adjourned until a period due notice of which would be made known.

TRUTH'S ECHOES; OR SAYINGS AND DOINGS IN MINING.

The Mining Share Market has been very animated during the week, and a large amount of business transacted. The dealings have not been confined to progressive mines, for several heavy shares have also changed hands, and an active enquiry is still maintained, which in all probability will result in completion. The reports from the several mining districts of both Cornwall and Devon are of a very encouraging character, whilst the improved standard for copper, and the further advance on tin, with the generally improved state of the metal market, tends to increase the buoyancy of share transactions. Transactions have been reported in WEST SETON, WHEAL SETON, COPPER HILL, and CARN BREA, at fair market quotations.——COOK'S KITCHEN, EAST BASSET, and STRAY PARK shares have been more in request, at slightly improved rates.——NORTH DOWNS shares have been in great request, and several heavy bargains effected at greatly advanced prices.——TOLCARNE, CALVADNACK, and NORTH TRESKERBY shares have been in demand, and the latter especially advanced.——SOUTH FRANCES shares have changed hands at lower rates, and are being more freely offered.——NORTH ROSKEAR and TINCROFT shares have been, and are still, enquired after, showing a tendency to further improvement.——EAST CARADON shares have greatly fluctuated during the week, and although a great many have been daily dealt in, the wants of the necessitous are not yet supplied. The decline arises from a temporary falling off in the 60, which has afforded the "bears" an opportunity of exhibiting some emotions of joy; but it is apprehended that that joy is only transient, as all the ends are improving, with a probability of a great discovery in the cross-cut south. It is a well known fact a slight change in the value of an end often lessens the market price of a mine from 18,000*l.* to 20,000*l.* by those interested in the depression, whilst it presents a chance of giving publicity to remarks wearing a fensible appearance, although unjust and truthless. Such calculations as appeared last week may have a tendency to destroy confidence and sweep away the merits of a mine; but when it is considered that the project is an individual and private speculation, to obtain shares at a depressed price, no *bona fide* shareholder would entertain a calculation so kindly and gratuitously given without seeing through the sophistry and object of the calculator.——MARKE VALLEY shares have been in good demand, at improved rates.——SOUTH CARADON and WEST CARADON shares have changed hands at market prices.——LUDCOTT shares have been in request, at improved prices.——HERODSFOOT, SOUTH CARADON WHEAL HOOPER, MARY ANN, and TRELAWNY shares have been dealt in.

GREAT WHEAL MARTHA shares have been, and continue, in good request at present market prices. A system of "bearing" these shares has been in force for some time past: and notwithstanding the chicaney pursued, and the varied attempts to reduce the value of the property by interested parties, the mine will, with present prospects, withstand all such futile efforts; and omnicient indeed must be that eye which can foresee the results of three months' working.——NEW TRELEIGH shares have changed hands at market prices, and enquiries still exist.——CARN CAMBORNE, GREAT RETALLACK, and EAST GRENVILLE shares have had a fair share of the week's business, the two latter at improved prices.——UNITY shares have also advanced, and active enquiries kept up.——GRAMBLER AND ST. AUBYN shares, after a state of long inactivity, have changed hands.——HINGSTON DOWN, WHEAL ARTHUR, WHEAL ANNE, &c., shares have been in request.

The improvement in the value of tin has produced a good demand for some of the favourite tin mines, and several transactions have taken place in the following:—PROVIDENCE, WHEAL MARGARET, GREAT WHEAL FORTUNE, WENDRON CONSOLS, DING DONG, ROSEWALL HILL AND RANSOM, &c.——WHEAL GRYLLS shares are in good demand, at advanced prices.

EAST CARADON: Notwithstanding the changes which have taken place during the last few days, the 60 west, on the caunter, is worth 18*l.* per fm., and the eastern end, which has fallen off, is now worth full 40*l.* per fm., but both are improving. In driving the cross-cut south they have intersected a large and promising lode, producing stones of ore of rich quality; it is cut into about 2 ft., and no south wall met with yet; consequently much excitement prevails, as they are expecting, from its general appearance, to cut a rich lode before the south wall is reached. The rise in back of the 60 is going up into an extraordinary course of ore. The 50 east, on the caunter, is now worth upwards of 30*l.* per fm., and daily improving. This is very important, as it shows the ore ground is lengthening in that direction.

At MARKE VALLEY they have an improvement in the 90 west, on Marke's lode, which is producing nearly 4 tons of ore per fm.; all the other places are without any change, yielding the same quantity of ore as for some time past, and reserves increasing.—— At WEST ROSE DOWN they are pushing on the cross-cut south; no discovery has taken place since last noticed. The walls of the engine-house are expected to be completed by the end of this week.——WHEAL LUDCOTT is represented as looking as well as at any previous occasion: every productive place is returning fair quantities of lead. They are in the course of dressing a parcel of silver ores, estimated about 3 tons, which is calculated to realise a large sum; but as a fair sample of the whole has not yet been taken, it may be premature to give an estimate with any confidence as yet.

At GAWTON an improvement in the 50 is reported, where they have a large and productive lode, yielding full 6 tons per fathom as far as ascertained, for the influx of water has overpowered the machinery, which will preclude further operations until the water is in fork. The discovery is in the south part of the lode, and considered very important, affording strong reason to believe that it is standing whole in the level above.

At GREAT TREGUNE the lode in the 80 west continues to look well; it is unusually large, and of a very encouraging nature, producing now full 1¼ ton of good ore per fm., and promising for an early improvement.

At SILVER VEIN a rumour prevails that the silver ores which have been so long under the model treatment are not likely to prove so valuable as anticipated by those interested; and, notwithstanding the great expenditure both of time and money incurred by the erection of elaborate works under the immediate supervision of the practical metallurgist, a portion of the ores which have passed through the novel ordeal, and recently sold, has not, it is stated, realised nearly so much as the gossan made when sold in a raw state. Whether such be the case or not may yet become known, as a general meeting of the proprietary is to be convened, when the "tons of silver" will be accounted for, or how it has evaporated explained.

CORNUBIA TIN MINE: In driving the western cross-cut they have reached the decomposed granite, and caiculate on cutting the lode very shortly; from the influx of water and other favourable indications they expect a good tin lode. The western shaft is down 6 ft. under the 30, and every arrangement for rapid progress is already made.

At WHEAL ANNE an improvement of considerable importance and value has taken place at Nine Stones, a portion of the sett far from the present productive places of operation; it is stated to be a splendid course of tin. The tinstuff now in course of stamping and dressing from the deep and shallow adits is more than sufficient to pay costs.

At GREAT RETALLACK the shaft is down to that point for another level where they will commence opening on the portion where the lode had predouninated, expecting a favourable change for that metal from the improved character of the ground going east. There is an excellent course of blende in the 35, on which they are about to operate.——WHEAL UNITY is represented to hold out considerable promise, and the several places of operation are exhibiting unmistakable evidence of improvement.

At NEW WHEAL CLIFFORD meeting, on Thursday, the purser was ordered to hand over the names of defaulters to the merchants, to recover the amounts due to them. The mine is represented to possess considerable merit, and it is to be hoped that all arrears of call will be immediately paid, and the operations recommenced.

At GREAT WHEAL BUSY they are looking remarkably well; the 100 end east is estimated at 17 tons of copper ore per fathom, and there are two winzes in the same level returning large quantities of ore. In the 90 there are three winzes, yielding respectively 14, 16, and 17 tons of copper ore, exclusive of fair quantities of tin. There are other places yielding large quantities of ore, which render the mine one of the most productive in the whole district.

At TOLCARNE the lode in the sump-shaft has improved, being 3 feet wide, and worth 3 tons of rich ore per fm. A new shoot of ore has been met with in the adit level.——At WHEAL DAMSEL the operations are going on satisfactorily, and they expect to cut the lode at King's shaft in about three weeks.——CARN CAMBORNE is reported to fully maintain the favourable opinions expressed, and the ground in the several points of operation is indicative of early and important improvements. The new south lode is looking very promising; the eastern end is worth 4*l.* per fm., and the western, 12*l.* The surface work is progressing and improving in appearance, by the piles of ore which are being raised.——At EAST GRENVILLE the lode in the engine-shaft continues to look well, and is now worth about 27*l.* per fathom for copper and tin. The 35 west and 25 east are also improving, and showing indications of a good orey lode not far off.

At SOUTH CONDURROW the lode in the 110 east is very promising, and, from its general appearance, likely to greatly improve. The several other places of operation are looking very encouraging.

At TRELOWETH they are progressing with the engine-shaft, which is nearly down to the 144. In the 134 west they are driving through the lode, to intersect the orey portion gone down in the winze below the 124, where it is worth from 25*l.* to 30*l.* per fm., but are impeded by the hardness of the ground. They have several important points in view, to which their labour is directed, and would have been accomplished were it not for the stiffness of the ground.

EAST ROSEWARNE is stated to have improved, the lode in the 55 east and west being worth in the former 15*l.*, and in the latter 12*l.*, per fm.: there is also a good lode in the rise, and the 58 is valued at 25*l.* per fm.——At PEDN-AN-DREA the most productive portion of the mine is about the 90 and 100; although the ends are poor, the backs and bottoms are in good courses of tin. The lode in the 110 east is represented as improving; it is very large, and producing some good stones of tin. They sold on Saturday last upwards of 10 tons of tin, realising 679*l.*

WHEAL SITHNEY AND CARNMEAL: Their prospects are gradually improving as the ground is being developed. At Sithney they have a general improvement throughout the mine. The 35 east is worth 20*l.* per fathom, the end of which is in whole ground to surface. The stopes in the back of the 35 west are worth 25*l.* per fathom. The 15 and 25 ends are 2½ ft. wide, and very much improved, containing excellent stones of tin. There are now on the floors large piles of rich tinstuff drawn from the ends and stopes.—At Carnmeal they are sinking three shafts, and the country in which the lode is embedded is of the most congenial nature; and from the character and appearance of the tinstuff the most confident opinions are expressed as to the permanency and profitableness of the mines. It is in contemplation to effect two sales of tin this quarter, which, no doubt, will exceed the amount of the previous quarter.

GREAT WHEAL FORTUNE continues to increase its monthly returns. The opening of the Carnmeal lode materially contributes to that success; and the deeper they sink the more valuable the chances of permanency from the productiveness of the lode.

NEW WHEAL VOR AND EAST WHEAL METAL: A change has come over the prospects, which at present are not so bright, if the reduction of their tutwork be any criterion; but a more favourable turn is looked for.

PROSPIDNICK is represented to have assumed a more favourable aspect, the respective places of operation having recently improved and likely to become much more productive.

JAMES LANE.

From Mr. LELEAN:—The general tendency of the Mining Share Market continues to improve, and, so far as can be ascertained from present indications and future prospects, there is every reason to believe that the time is not far distant when an unusual degree of animation and buoyancy will again pervade this important branch of business. In common with most other interests, it has already derived some benefit from the increased abundance and easiness of money, while an additional effect has been produced by the satisfactory results of the harvest, which, by placing most classes of the community in a better position, are likely to increase the demand for various descriptions of manufactures. A few months ago when tin was declining in price, and a general depression pervaded almost every description of enterprise, I deemed it expedient to advise the public at large to realise their securities before the depreciation which appeared inevitable should ensue. Since then, however, the amelioration to which I have already adverted has supervened, and an extensive recovery has occurred in the value of tin—about 6*l.* per ton in the space of two or three weeks. I can now confidently recommend investors to employ their available resources in the purchase of progressive and dividend-paying mining shares.

There is now abundant evidence of a decided change for the better, and those who are seeking for eligible investments will do well to avail themselves of the present favourable opportunity of purchasing while the quotations remain at a comparatively low level. Apart from the encouraging symptoms already described, an impulse is likely to be given to mining pursuits by the development of the French Treaty, which, from information already obtained, is certain to augment the exportation of metals from this country in the shape of various manufactured articles. Another circumstance which may also exert a beneficial influence upon the metal trade is the approaching International Exhibition, which will, no doubt, be the means of directing the attention of foreigners to many articles of British industry for which at present there is comparatively little demand in the principal markets on the Continent.

From Mr. EDWARD COOKE:—The market has been more active than for a long time past, and we believe that a prosperous period for mining securities has now set in; and when we use the term mining securities we do not allude to such myths of concerns as more than one broker, probably, has been written to about during the past week, with a request to know if they can be disposed of. It really does seem surprising that parties can be found ready to part with their capital upon representations made in some highly-coloured prospectus, containing the most flattering statements, without having any legitimate foundation. Surely there are well-established mines enough that will bear the strictest scrutiny in which to invest. In these—speculative as they are beyond all doubt—the investor has a fair chance for his money, which not unfrequently becomes doubled in a very short time. This applies to what are termed progressive mines; and of this class there are yet a few that may be invested in just now with almost a certainty of paying well. The principal mine that has been dealt in during the week has been EAST CARADON. This mine is unquestionably the best one in Cornwall. Let us be perfectly understood in this. There are others that are returning more ore than East Caradon, but the profit on its working is larger than that of any other mine of the same magnitude. The cost of returning the ore from this mine does not, we believe, exceed 5*s.* in 1*l.* The reserves of ore at and above the 60 fathom level are estimated at 100,000*l.* In the 50 fathom level, 120 fathoms of ore ground has been driven through, and in the 60 fm. level from 50 to 60 fathoms of ore ground has already been driven through, worth on an average about 70*l.* to 80*l.* per fathom. It cannot be expected a lode will continue without change; in fact, the best lodes in Cornwall have proved to the contrary, and that in EAST CARADON is not an exception. There is everything to indicate that the deeper levels, when the shaft is sunk to extend them, will prove equally as rich as the 50 and 60: hence the present value of the mine can scarcely be determined, but unless we are much mistaken it will reach a higher price than it has ever yet attained, for it cannot fail to be appreciated as one of the very best investments in mining property, notwithstanding all the fluctuations caused by speculative operations. MARKE VALLEY, under the same management as East Caradon, is a safe mine to invest in. WEST CARADON we still consider ought to receive more attention than it has had for some time past. There are many important points to come off, any one of which turning out favourably will have a great effect on the shares. WHEAL GRYLLS, we understand, is looking exceedingly well. An engine and stamps have been purchased. This is a step that should have been taken long ago, when the mine would, no doubt, have been in a dividend state ere this. A call of 1*l.* per share will be made at the coming meeting to pay for the engine, &c. The price of tin has advanced again, money is abundant, and the harvest has been well secured; therefore we look forward with great confidence to a healthier state of things than has been witnessed for a long time past, and good mines will be sought after as a means for the employment of capital.—P.S. At EAST WHEAL DAMSEL the cross-cut has been extended about 19 fms. The Consols lode is expected to be reached in 6 or 7 fms. more driving; this is a very interesting point in the mine, if cut rich it will prove a prize for the Gwennap district. The ore from the new discovery at TOLVADDEN realised 18*l.* per ton.

[From Messrs. R. TREDINNICK and Co.'s *Trade Circular*.]

Scarcely any branch of industry has presented a more sound or extensive development during the years 1860-1 than British Mining Enterprise. This healthy increase may be attributed, amongst other circumstances, to two principal causes—the one being the rapid dispersion of ignorant prejudices, and the other the large profits which have been realised during the past few years upon mining property in general. At no very distant period of time mining was but little known by the general public out of Cornwall and Devonshire. Wonderful stories were told in very select circles of the vast wealth obtainable, and equally wonderful reports were occasionally heard how some unfortunate wight, whose enterprise had led him to embark money in mining speculations, had fallen a prey to the barbarians of the West, and had lost his all through the superhuman machinations of the gnomes inhabiting the bowels of the county. We have heard in our youth—in fact, how few of us have not—of the extreme danger of mining speculations. Most of us have been brought up in the belief that the possession of a mining share was all but synonymous with utter ruin; and doubtless our thrifty, but slow, progenitors honestly entertained that opinion. In these latter days, however, we have become familiarised with the idea. We can go to rest at night with an easy mind, albeit we have in our strong box a share in a mine or two. We no longer fear the barbarian or the gnome, and we are more than half disposed to think that Cornishmen have become so liberal in their notions as to allow a few shares, even in their best mines, to pass across the river Tamar, and gladden the hearts and fill the pockets of those who have no farther knowledge of mining than comes instinctively with the possession of a dividend-paying share. So far have we progressed within the past few years, and so shall we move on as mining ceases to be a mystery, and the conviction gains ground, that with ordinary care and attention (as every man ought to bestow upon his daily avocations), mining may be made more certainly profitable, and with less risks than many branches of our commerce, which our mercantile magnates fondly believe are perfectly *legitimate*.

There are two or three causes that primarily affect mining enterprises. One of the most frequent failures may be set down as practical incompetence in the committees of management. It very often happens that from this cause the fairest speculations have been ruined, and the shareholders, who had a right to look for good returns from their adventure, are disappointed and disgusted with results achieved. As a matter of course, the committee of management participates in the ruin and devastation they cause, and thus mining and all that appertains thereto gets a bad name, and the most legitimate speculations goes a-begging, unless fortunately they happen to fall into the hands of men of influence and position, who are able to carry them through without calling upon the public for assistance. If committees, again, were more deeply impressed with the importance of the trust they should repose in their executive (the secretary) they would be less chary in their reward for the use of a man's experience, for his years of hard toil, for his constant watchfulness over the interests confided to his charge, and for his honesty and fidelity. In some cases duties so various are insisted upon, that a poor mortal need have the hands of Briareus and the eyes of Argus to carry them out with effect. Ubiquity, too, must be amongst his necessary accomplishments, in order to carry out the behests of his employers, and this too without an adequate reward. The result of this is that work is frequently done improperly; the superintendence is not constant, nor is it complete, and the usual result is dissatisfaction on all sides. Now, if the committees of management in London and elsewhere would endeavour to acquire a moderate insight into mining affairs, much disappointment to themselves and friends would be avoided, and, more than all, the risk of embarking in British mining adventure would be so far diminished that it would become a recognised branch of legitimate investment; whilst it further enriched the shareholder, who contributes largely to the increase of the prosperity and resources of the nation. To make mining investments pay the exercise of sound judgment, practical knowledge well applied, good localities and ample capital, are indespensable; four-fifths of losses in mining investments spring from illegitimate causes. Again, it must be remembered that mining operations in Cornwall incur far less risks of late years than formerly; science and investigation have thrown great light upon the subject, whilst ample proof can be adduced that mining operations can be conducted with as much certainty of success as the various mercantile transactions that daily take place between our merchants and those of distant and colonial countries.

To those connected with mining pursuits it is now unnecessary to observe that the Cost-book System is an absolute partnership, both in spirit and practice. In the formation of mining companies it is often asserted, and many are induced to join from a conviction that no responsibility exists; yet each registered shareholder is individually liable for all engagements outstanding; thence the cause why merchants, bankers, and capitalists prefer the Cost-book System over the Joint-Stock Act—the former secures equal protection against unfair risks, and ensures a fair and equitable distribution of all profits accruing. No shareholder can shirk responsibility, thence none are subject to other than legitimate pressure under failure or disaster of every description that can transpire. The Cost-book System possesses several peculiar advantages. A shareholder is not necessarily obliged to remain responsible, as in the case of banks, for three years after transfer of shares, or compelled to get a responsible substitute, as in the case of railways and joint-stock companies, to the satisfaction of his copartners, or otherwise remain liable for debts not only existing, but thereafter contracted. Under the Cost-book System, a shareholder can end his partnership and responsibility at any moment by a simple notice of relinquishment addressed to the purser, paying his proportion of debts, and claiming his share of any and all machinery, materials, ores, and moneys in hand belonging to the company, and which must be paid over within a period of 12 months from retirement. It is self-evident that shareholders in mines conducted on the Cost-book System are responsible for all outstanding liabilities. It becomes a duty incumbent on the constituencies of all companies to have their accounts audited regularly every two, three, or four months, so that they become practically protected against accumulated obligations; as our experience warns us against the tender mercies of the merchants of Cornwall,

who, when called into action for self-interests, are more likely to resemble the wreckers of the 17th century than the more liberal and enlightened merchants of the metropolis of the day. The merchants of the West do not like limited liabilities. The Cost-book System fully protects all who look after their own affairs: we can but advocate regular audits and necessary freedom from possible abuses.

FOREIGN MINES.

ALTEN AND QUÆNANGEN.—C. Trelease, Aug. 22: Quænangen, Lode E: The prospects continue good in Saxe's shaft, where the lode is 1½ ft. wide, yielding 2½ tons of good work per fathom. In the shallow adit foot stope the lode is divided into three parts, two of which against the footwall are well mixed with ore throughout, worth together 3 tons per fathom. In the deep adit east the lode continues rather irregular in size, but is seldom without ore intermixed. The 25 fm. level foot stope, west of Cole's shaft, is somewhat improved, where the lode is nearly 5 ft. wide, yielding full 4 tons of ore per fathom. The west end of this working shows more solid ore than for some time past. We are driving westerly from the 10 fm. level foot stope to ascertain if the ore, or part, is struck off in that direction; the lode is at present interspersed with small strings of yellow ore throughout, but its width is only about 1 ft. We have begun a stope near the surface, on the west side of the workings, on lode G, where its width is 4 feet, with good dregs work disseminated throughout, full 4 tons per fathom. During the last week the air throughout all the workings has been extremely foul, indeed in some of the bargains the lights would not burn at all; it is, doubtless, caused by the state of the atmosphere, which has latterly been thick and foggy. We hope the ventilation will improve again in a few days, otherwise artificial means must be adopted at once, so as to enable us to carry on the usual operations.—Raipas: In the shallow north-west stopes the vein of purple ore is from 4 to 6 in. wide; the stratum is of a good description, and, on the whole, the appearances are more favourable than before. The 10 is now getting under the above workings, where several small veins of purple ore have latterly been met with, and the signs are indicative of further improvement as we advance. The heavy spar lode above the 10 yields from 1 to 1½ ton of ore per fathom, but the continued hard ground makes against us. The other points of trial are without any change to note since our last.—Old Mine: In the midway level southerly the lode continues upwards of 2 feet wide, with some orey work intermixed; it rather deteriorated shortly after our last, but now looks much more promising again. We holed the winze from this working to the 10 last week. The distances proved all correct, and the ventilation throughout is now excellent. We have removed the winzemen to continue the midway level northerly, where the lode is 1 ft. wide, with good saving work intermixed. In the 10 southerly the lode is 3 ft. wide, composed of friable quartz, mundic, and some saving work. The lode in the roof stope is 6 ft. wide, yielding about 4 tons of ore per fathom. Bergmester's side stope still looks tolerably well, where the lode is 5 feet wide, yielding 3½ to 4 tons of ore per fm. The branch of ore striking off westerly from No. 1 foot stope still holds out promising indications, and at present turns out 3 tons of ore per fathom. The lode south of Pederson's rise looks equally good as before, being from 6 to 7 feet wide, worth 5 tons of ore per fathom. In the stopes north and south of the rise the lode varies from 2 to 5 ft. in width, yielding 3½ tons of ore per fathom. In the north, or rather shallow adit foot stope, the lode is 4 feet wide, composed chiefly of quartz, with copper ore irregularly intermixed—the latter averages about 2 tons per fathom. Carr's adit is still in rather a hard bar of ground, though good facings have been met with more frequently of late, which greatly facilitate the driving. At the United Mines we are making a trial on Woodfall's lode, above the 35, where it is 1½ ft. wide, worth about 1½ ton of ore per fathom. The sink at Michell's is still much impeded with the water, but we hope to succeed in getting through to the level. The lode at Quænvig continues about 2 feet wide, with some tolerable dredge work intermixed.

COPIAPO.—A. Anthony: Checo Mine—Estimated quantity of ores for July:—1st class ore, 96 qntls., 15 per cent.; 2d class, 256 qntls., 12 per cent.=352 qntls. The stopes in back of the 40, west of Price's shaft, are producing about 1 ton of 17 per cent. ore to the fathom. The lode in No. 2 chifion is 2 ft. wide, producing about 2 tons of 12 and 18 per cent. ores to the fathom. The stopes in back of the 30, on the north lode, are producing about 4 tons of 12 per cent. ore to the fathom. We are progressing favourably in clearing the place referred to in my last report. The foregoing are all our operations at present.

NEW GRAND DUCHY OF BADEN.—J. Richards, Sept. 2: At Schindler engine-shaft, in the 44 north, now extended from shaft 51 fms. 2 ft. 6 in., we have 2 ft. of the lode carrying with the end, worth 3*l.* per fm.; the other part stripping down towards the end is 3 ft. wide, worth 7*l.* per fm., and moderately easy for breaking; the same level south is extended 27 fms. 2 ft. 6 in., 1½ ft. of the lode is in this end, which is worth 8*l.* per fm. The stopes in back of this level are producing on an average 10*l.* worth of ore per fm. The stopes in the back of this level, north of the shaft, are worth on the average 8*l.* per fm. The 34 north now extended 73 fms. 2 ft. 6 in. is driving in moderate ground by the side of the lode; behind this end a pare of men are cross-cutting the lode, where they have got into it 8½ ft., but not through—so far it is composed of quartz, fluor-spar, mundic, and some good lead ore, worth of the latter 8*l.* per fm. In the same level south, now extended 47 fms. 2 ft., there are several small branches, and not being satisfied that this is the whole of the lode, we have an extra pare of men cross-cutting in the west side near the end, to prove whether there is more standing in that direction or not.

LINARES.—Aug. 31: Pozo Ancho: West of Engine-Shaft—South Lode: The 95 fm. level, west of Seguro's winze, is worth 2 tons per fm.; the lode is very compact and regular, composed of steel-grained lead. The ground in the 85, west of Seville winze, is disarranged by cross-courses. The 61, east of Warne's shaft, is worth ½ ton per fm., the lode is chiefly composed of quartz and lead ore. The 60, west of ditto, is worth 3 tons per fm.; the lode is of a most promising and productive appearance, opening splendid tribute ground. The ground in the 51, west of Monte's winze, is hard for driving. The 41, west of Crosby's shaft, is worth ½ ton per fathom; the lode is large, spotted throughout with lead, and of a most promising appearance.—Rast of Engine-shaft: The 95, east of engine-shaft, is worth 1½ ton per fm.; the lode is wide, producing very large lumps of lead. The 85, east of Ramiro's winze, is worth ¼ ton per fm.; the lode is small, and not near so productive as the bottom of the 75 fm. level. The 75, east of Taylor's cross-cut, is worth 1 ton per fm.; the lode has declined in value, but we are expecting an improvement daily.—North Lode: The 75, east of Ordonez winze, is worth 1½ ton per fm.; the lode is very large, with lead disseminated throughout. The 65, east of Damaso's winze, is worth 1 ton per fm.; the lode is chiefly composed of calcareous spar, with lead scattered throughout.—Shafts and Winzes: The Spanish sumpmen are cutting ground for doorpiece, connecting plunger, &c., in Santo Tomas engine-shaft. San Francisco shaft is worth 1 ton per fm.; the lode is compact, and ground rather hard for sinking. La Suerte winze is worth 1 ton per fm.; the lode is large, and underlying south very fast, rendering it difficult to sink. San Eduardo winze is worth 1½ ton per fm.; the lode is strong, and of a very promising appearance. La Calle winze is worth 1 ton per fm.; the lode is scarcely as productive as formerly. Nicolas' winze is worth 1½ ton per fathom; this is going down in a valuable piece of ground. Ochoa's winze is worth 2 tons per fathom; the lode is chiefly composed of gossan and lead ore, opening splendid tribute ground.—General Remarks: The English sumpmen having arrived, good dispatch will be made in cutting the ground alluded to above, when we shall carry down ground for cistern, bearers, &c., and resume sinking the shaft as early as possible. The stopes are, on the whole, without any important alteration. There being several stopes idle in the western part of the mine, in consequence of the stuff which accumulated during the time occupied in throwing out the old engine and fixing the new one, we scarcely know what estimate to put on the raisings of September. The low price at which the bargains was set on Saturday last will also tend to check the raisings; I do not think they will exceed 400 tons.

FORTUNA.—Aug. 31: Canada Incosa—West of Taylor's Engine-shaft: The lode in the 7th level, west of Gomez' winze, is wide, spotted with lead, and promising improvement. The 6th level, west of O'Shea's shaft, is worth 1½ ton per fm.; the lode is chiefly composed of carbonate of lime and lead ore. We are trying hard to communicate the 5th level, west of Fernandez' winze, with the end east of Henty's shaft, but the ground is so hard that the men are making small progress. The 4th level, west of Rendon's winze, is worth 1¾ ton per fathom; the lode is looking very kindly, composed of carbonate of lime, quartz, and lead. The lode in the 3d level, west of Judd's shaft, is small and poor, and the ground hard for driving.—East of Taylor's Engine-shaft: The lode in the 4th level, east of Lownde's shaft, is small and unproductive, but we expect an improvement shortly, as there is lead in advance of this in the level above. Donaigre's winze is worth 1½ ton per fathom; this level is opening valuable tribute ground. The 3d level, east of Carros' shaft, is worth 1¾ ton per fathom; the lode is chiefly composed of barytes and lead ore. The ground in the 2d level, east of Bartolome's winze, is hard for driving; the lode contains spots of lead.—Los Salido's Mine: The 5th level, east of Antonio's winze, is worth 2 tons per fm.; the lode is very large, and of a very promising appearance; the elvan in this leval, west of Fernandez' winze, is hard for driving through. The 4th level, west of Salvador's winze, is worth 2 tons per fm.; the lode is very changeable, at present opening splendid tribute ground; the same level, east of Cologan's shaft, is worth 1½ ton per fathom; the lode continues with great regularity, in fact, is very similar to the one driven through in the 3d level. The 3d level, east of Muno's winze, is worth 1 ton per fm.; the lode is chiefly composed of barytes and lead ore; the same level, west of Buenos Amigos shaft, is worth ½ ton per fm.; the lode is variable, and we expect an improvement shortly. The 2d level, east of San Miguel shaft, is worth ¾ ton per fathom; the lode is looking very kindly, ground hard for driving. The 1st level, east of ditto, is not to value; the men are opening on the north branch, which is now proved to be the main part of the lode. The clearing and securing of the 2d level, west of Buenos Amigos shaft, is suspended for the present; as it is now a great distance from Buenos Amigos shaft, the stuff can be much cheaper passed to the new shaft now in process of sinking when it reaches the 2d level.—Shafts and Winzes: Morris's engine-shaft is worth 1½ ton per fm.; the lode is of the same character as when last reported on. San Pablo's shaft is worth 1 ton per fm.; this shaft has reached the required depth for the 4th level. San Gabriel shaft being off the lode is without any important alteration. Olalla's winze is worth 1½ ton per fm.; the lode is very regular, and promising continuance.

EAST KONGSBERG NATIVE SILVER MINING COMPANY OF NORWAY.—The advices from Mr. Macdonald (dated Aug. 20), state that since last writing the vein in the bottom stope in Ramsrud Mine has given beautiful specimens of native silver. Under date of Aug. 29 the report states that the small drum on the south side of Sundse Mine continues to give silver in every blast, but on account of its smallness the quantity is inconsiderable. The silver, however, is disseminated throughout the whole of the gangue, and should the vein enlarge in depth, there is every prospect that the silver will increase in proportion. In Neues Gluck they had driven the adit 13 in., and the caunter adit 10 in. since the last weekly report. The adit in Anna Sophia is nearly ready for laying down sleepers for rails.

LAGUNAZO SULPHUR AND COPPER.—W. H. Tregoning, Aug. 31: I beg to present to you the measurement of work done during the month, and what I propose doing the one ensuing. Driven cross-cut north of adit level 2·50 metres; passed through a small lode of ore about 3 feet wide. Cleared the adit level west to Pozo de las Grajus 40 metres; continued west from Pozo de las Grajus 12 metres 20 centimetres: together 52 metres 20 centimetres. Stoped in bottom of same level adit 27 metres long, as above. Sunk Pozo de las Grajus 14 metres to communicate with adit levels; this shaft has required much timber to secure it in sinking, and so has the level below. Cleared a pozo west of Las Grajus Pozo to the depth of 12 metres, which appears to lead to adit level. Cleared in the open cut 126 cubic metres, to leave the back of the ore clean in the western extremity of the "Laguna;" cleared an old shaft, and sunk through the ore 3 metres deep. Sunk the shaft in the eastern extremity of the Laguna 4 metres through ore of good quality (sulphur). This, with what had been previously done, has laid a mass of ore open 20 metres wide and 30 long, or all the length of the Laguna, and 6 metres deep, or, say, in round numbers, 1500 tons of ore. Cleared open cut from river to adit 94 metres; enlarged adit so that a man can get through, with drains around the collars of many of the shafts to take away the rain water. I propose to continue next month clearing and stoping the adit level west from Pozo de las Grajus to the Laguna; continue clearing adit shafts as required; clear and enlarge adit from river to the mine as fast as possible, so that a man can get through; sink an old shaft east of footway-shaft (in ladder-shaft) to adit level; it was cleared to the water level, and the water on the back of the ore now it is drained and can be sunk for a few metres deeper on the ore, or until it meets with water, and by-and-bye it will serve for an adit shaft for the eastern part of the mine. Drive the cross-cut north to see if there are any more lodes to be met with north of the old workings. To raise ore I am wanting nothing but the few materials and rails I have mentioned in my previous letters and orders to go ahead. Once in working order there is no doubt but what I shall be able to raise good quantities of ore regularly.—P.S. The average number of men employed has been thirty-three.

CLARENDON CONSOLS.—Josiah Martin, Aug. 21: Stamford Mill Mine: We have driven about 4 fathoms north-west at the 94, and have met with another branch bearing copper ore and carbonate of lime; the rock is carrying water, and the ground is a little easier for driving. I think we must be getting nearer the north lode, which I hope to advise our cutting by next mail. In the stopes in the back of the 82, on the north lode, the lode is large, and worth ¾ ton of ore per fathom; it looks as if we have the top of a bunch of ore, the richer and larger part being below this level. We have suspended the 82 south-west for the present, and put the men to sink a winze from the 82 to the 94. We have commenced it to the east of the cross-cut driven at this level, so we may not have so far to drive at the 94, where the air is not good, and the end hot for the men working in it; this winze is farther east than where we had any ore at the 82. Unless the ore dips east we cannot expect much ore in sinking. The lode at present is 6 feet wide, and worth 4 cwts. of ore per fathom. The lode in the 70, south-west of shaft, is about 3 feet wide, composed of killas and red clay, with mundic. We have met with another lode in the 46 south-west, on the right-hand side, about 1 foot wide, carrying gossan and prian, and letting out a quantity of water. The lode in the end at present is about 2 feet wide, consisting of gossan and prian, with green carbonate of copper ore. We are getting on with the work for fixing the 6-inch plunger at the 82. We shall put in the shaft rods from the 46 to the 82 next week. The cattle with the mules are bringing up the 9-inch pumps and H-pieces, with the rest of the machinery, and taking down the dressed ore in return. The heavy showers of rain and the bad state of the roads are much against us. We have sent to wharf about 8 tons of dressed ore, and have 2 tons more at the mine. We have also about 10 tons undressed on the floors, which we have to get bucked, or we shall let it stand until we see what the lode at 94 is, if it is worth while putting up the crusher at once.

LUSITANIAN.—Palhal Mine—Basto's Lode: The lode at Taylor's shaft, sinking below the 60, is 6 ft. wide, composed of quartz, with a branch in it worth 1½ ton per fm. In the 60, east of Taylor's shaft, the lode is 4½ ft. wide, worth 3 tons of ore per fm.; in the same level west the lode is unproductive. The lode in the 50, west of Taylor's shaft, is worth ¾ of a ton per fm. In the 38, west of Taylor's shaft, the lode is worth 2½ tons per fm. The 50, east of River shaft, has a lode in it 3 ft. wide, producing 1 ton of ore per fm. In the 38, east of the same shaft, the lode is 1½ ft. wide, unproductive. The lode in the 28 east is 3½ ft. wide, composed of quartz, spotted with lead. In the 18 east the lode is 4 ft. wide, yielding stones of copper ore and lead. The lode in the adit, east of Pinto's shaft, is 1 ft. wide, composed of schist, spotted with lead. In the adit, west of Perez' whim-shaft, the lode is 1 ft. wide, worth ½ ton of ore per fm. The lode in the 8, west of Abel's winze, is 1 ft. wide, producing good stones of ore. In the 8, east of Perez' shaft, the lode is split into small branches. The lode in Ball's winze, below the 50, east of Taylor's shaft, is 3½ feet wide, composed of quartz and copper ore, worth 1 ton per fm. The lode in the stopes No. 1, in back of the 50, west of Ernesto's winze, is worth 2½ tons per fm. The lode in the stopes No. 2, in back of the 38, west of mark, west of Clondino's winze, is worth 1½ ton per fm. The lode in the stopes No. 3, in back of the 50, east of Taylor's shaft, is worth 1½ ton per fathom. The stopes No. 4, in bottom of the 28, west of Clondino's winze, are worth 1 ton per fm. The stopes No. 5, in back of the 38, east of Clondino's winze, are worth 1 ton per fathom. In the stopes No. 6, east of Jackson's winze, in back of the 50, the lode is worth ¾ of a ton per fm. The lode in the stopes No. 7, west of Taylor's shaft, in back of the 50, is worth 1½ ton per fm. The lode in the stopes No. 8, east of Figueridо's rise, in back of the 28, is worth ½ ton per fm. The lode in the stopes No. 9, in back of the adit, west of Perez' whim-shaft, is worth 1 ton per fm.—Mill Lode: The lode in the 50, west of River shaft, is worth 1 ton per fm. The lode in Roderigue's rise above the 38, west of the caunter lode, is worth 1 ton per fm. The lode in the 28, east of junction winze, is worth 1 ton per fm. The lode in the 28, west of the slide, is 6 in. wide, producing good stones of ore. The lode in the stopes No. 10, in back of the 18, east of Dea's winze, is worth 1 ton per fathom. The lode in the stopes No. 11, in back of the 38, west of the caunter lode, is worth 1 ton per fm.—Caunter Lode: The lode in the 50, west of Taylor's shaft, continues in small branches. The lode in Luiz' winze, below the 38, west of Taylor's shaft, is 4 ft. wide, producing 1 ton of ore per fathom.—Great Caunter Lode: The lode in the 20, west of the slide lode, west of Oak shaft, is 1½ ft. wide, unproductive. The lode in the stopes No. 12, in back of the 20, west of Oak shaft, is worth 1 ton per fm. The lode in the stopes No. 13, in back of the 20, west of the slide lode, west of Oak shaft, is worth 1½ ton per fm.—House Lode: In the 30, west of Oak shaft, the lode is 6 inches wide, composed of flookan. In the 20, west of the slide lode, west of Oak shaft, the lode is 6 in. wide, producing small stones of ore.—Slide Lode: In the rise above the 28, against Abel's winze, the lode is 3 ft. wide, unproductive.—Carvalhal Mine: In the adit level, west of the Caima, the lode is 3 ft. wide, composed of quartz and mundic. The lode in the 10, west of Henrique's winze, is 1¼ ft. wide, producing good stones of lead. In the 10, east of Henrique's winze, the lode is 3½ ft. wide, composed of quartz and lead, producing 1 ton per fm. of the latter.

CENTRAL AMERICAN.—July 27: San Pantaleon: During the month Cornubia engine-shaft has been sunk by nine men 2¼ varas, at $65 per varsa. The lode in the bottom of this shaft is 18 inches wide, being a mixture of calc-spar, iron pyrites, and blende ore, and is producing a little saving work, with a very encouraging appearance. The ground just now is hard and the water very quick, so that we are afraid our progress here will be slow. The shaft is sunk 6 fathoms 4 feet below San Juan level, leaving about 3 fathoms 2 feet more to sink to reach the 20.—San Hilario: A new stope has been commenced in the back of this level this month, called Lara's stope, where the lode is 18 inches wide, worth about 4 cwts. of good quality silver ore per fathom.—San Vicente: The lode in Alvcrado's stope, in the back of this level, is 20 in. wide, worth from 4½ to 5 cwts. of rich silver ore per fathom.—San Damasio: In No. 6 stope, in the back of this level, the lode is 2½ feet wide, composed of flookan, calc-spar, with iron pyrites, and is producing some good saving work, with indications of soon becoming more productive.—Dolores: The lode in No. 2 stope, in the bottom of this level, on the eastern side of No. 2 cross-course, is 18 inches wide, worth from 15 cwts. to 1 ton of rich silver ore per fathom.—San Juan, or the 10 fm. level under Dolores: The level extending east from No. 2 cross-course (Dolores) has been advanced by six men 11 varas, 5 varas at $9, and 6 varas at $8 per vara; and we are glad to state that our expectations respecting the lode at this point have been realised, seeing that it has produced for the last 6 or 7 varas driving from 10 to 15 cwts. of rich silver ore per fm. in the present end, where the vein is 20 inches wide; it is worth 1 ton of rich ore per fathom. The same level extending west from Cornubia engine-shaft has been driven by six men 4½ varas, at $12 per vara, and it is now holed to the winze sunk from the level above about 30 fathoms east from Taylor's engine-shaft. The lode in this end is large, being 3½ feet wide, well defined, and regular in its bearing, composed of calcareous spar, mundic, and a little blende ore, with a very encouraging appearance, and turning out some saving work of good ley. The lode in No. 1 stope, in the back of this level, on the eastern side of No. 2 cross-course (called No. 1 stope, in the bottom of Dolores, in last month's report), is 2 feet wide at present, producing from 2 to 2½ tons of good quality silver ore per fathom. In Alfaro's stope, in the back of the same level, east from Cornubia engine-shaft, the lode continues rather small, now 9 inches wide, worth for rich silver ore from 3 to 4 cwts. per fathom. The ground here is hard.—San Alfonzo Deep Adit: The eastern level extending by lines towards the shaft has been advanced during the month, by three Englishmen and four natives, 5¼ varas. The ground here is not quite so hard as it has been.—San Antonio Mine: Six men have driven the level extending east from Ellery's shaft 9 varas, at $9 per vara. The lode in this end is 2 feet wide, composed of porphyry, mundic, blende, and iron ore, being a very promising-looking lode. We omitted to state in last month's report that in driving through an arch of ground left standing by the former workers in the western level from Ellery's shaft we discovered native and chloride silver in the lode. A sample containing the former of these precious metals which I assayed gave 111 ozs., and a sample containing chloride 525 ozs. of silver per ton of ore.—Santa Rosalia Mine: Six men have driven the cross-cut south, driving towards the main lode, 7 varas, at $8½ per vara. The ground is pretty much the same at this point as it has been for the last two months. This cross-cut is now driven a distance of 38 varas, leaving about 36 more varas to drive to reach the lode, considering it maintains its present underlie. An Englishman and three natives have cleared and secured the old adit level 7 varas, but without meeting with whole ground.

Aug. 1.—I have much pleasure in stating that altogether things have gone on satisfactorily. You will see by the mine agent's report that the San Pantaleon Mine looks very cheerfully. The end east of San Juan level is still worth 1 ton of good ore per fm., and the stopes altogether producing well. I went myself the day before yesterday through all the workings, and I may say was very much pleased. The stope No. 1, in San Juan level, on the eastern side of No. 2 cross-course, looked splendid indeed. The lode where they were just then stoping was fully 3 ft. wide, producing rich ore for the whole of this width. If the lode in the next deeper level should improve in the same proportion, you will have a very valuable mine, and we must endeavour by all possible means to ascertain this as soon as we can. The last month's return of ore was 59 tons 1 cwt., containing, according to assays, 11,600 ozs. of silver, averaging 196 ozs. per ton, which is a very good considering this ore has been obtained from very few stopes.—We have sent to the mint 1584 marcs 2¾ ozs. of silver, producing $15,619 4c. I hope to dispatch a similar amount towards the latter part of this month. The ore in stock ready for transmission to England amounts to 34 tons 15 cwts., but noue could be sent away in consequence of the unfavourable weather, and the muleteers being employed in conveying the cochineal crops.

TIN MINING IN SPAIN.—From the exertions which are being made to develope the tin mines of Spain, it may fairly be presumed that it is seriously intended that Spanish tin shall become the rival of that from Cornwall and the Indian Archipelago in the markets of the world. In addition to the several companies for bringing Spanish tin into the market to which we have already referred, and now in satisfactory process of development, we this week announce the formation of another influential company—the Zamora Tin Mining Company—the prospects of which are considered to more than equal any that have preceded it. The property which the Zamora Company propose to work is situated near the source of, and in immediate proximity to, the River Douro. Twelve pertenencias adjoin each other, and four others, forming the Santana Mine, are a short distance from the main portion of the property; the total extent of ground covered exceeding 350 acres. The company are to pay 4000*l.* in paid-up shares for the transfer of the property (such shares not being entitled to dividends until 10 per cent. has been paid as dividends on the remaining 8800 shares), beyond which there is a royalty of only 1-25th. Capt. W. Jeffrey, of Caldbeck, has visited the district, and inspected the mines and surrounding properties; his report is highly encouraging.

THE HISTORY OF VENTILATION.—Since the return of Mr. Pepper to that well-known place of instructive amusement, the Polytechnic, his highly-popular and interesting lecture on the History of Ventilation has continued to afford the greatest amusement to the many persons who nightly form his audience. That a subject involving so many scientific considerations as ventilation could be made so attractive that a discourse upon it gives equal pleasure to young and old excites general surprise, and we undertake to state that few leave the Polytechnic lecture theatre without the conviction that as an expounder of popular science Mr. Pepper is unsurpassed. Amongst other attractions of the institution we must not forget to notice the entertaining "Tour of the Rhine," which the visitors are enabled to make under the care of that experienced guide, Mr. J. L. King. So familiar is he with every spot along the route that he effectually protects the uninitiated from the extortion of the stewards of the Rhine steamers and from the incivility of Prussian officials which is sometimes spoken of, but which few who have had intercourse with Prussians believe to exist; the entire journey is performed rapidly, cheaply, and even the most delicate feel no inconvenience from sea-sickness. The models in the Polytechnic Institution are continually receiving fresh additions, and the picture-gallery, which has recently been added, contains some of the most successful efforts of rising artists. Indeed, there are few places in the metropolis at which a leisure hour can be more pleasurably and profitably spent.

AICH'S METAL.—The composition of this celebrated alloy for cannon, with which such valuable results have been obtained in the Austrian marine arsenals, has hitherto been kept a secret. It possesses a high degree of tenacity; it can be puddled, hammered, and worked, like the best forged iron, and when cold can be considerably bent without cracking or breaking, while its absolute and relative resistance exceeds that of iron of good quality. Recent experiments assign to it the composition of 60 parts copper, 38·2 zinc, and 1·8 iron. It is, however, supposed by some that the iron is of no real value, being only useful in diminishing the nett cost of the alloy.—*London Review.*

Mining Correspondence.

BRITISH MINES.

ABERDOVEY.—A. Ede: The cross-cut at the 42 has been extended 7 ft.; we have put two more men here. The stope in back of the 32, north of winze, on main lode, is producing 1 ton per fm., and is set at 3*l.* per fm. We have set a new stope in the 22, at 30s. per fm. In the stope at the 12 the men are making fair progress. All other operations are without alteration.

ALFRED CONSOLS.—S. Uren, T. Hosking, Sept. 11: Nothing new in the 160 or in the 150, driving east of Davey's engine-shaft, for the past week. The 140, driving east of the said shaft, on the north part of the main lode, is 1 ft. wide, worth 10*l.* per fathom. We have commenced to drive east and west of the north cross-cut, at this level, on a branch discovered about a month since; in the western end it has considerably improved in the past week, both in size and value; in this end it is from 18 in. to 2 feet wide, worth 10*l.* per fathom—a kindly lode. The eastern end is worth 6*l.* per fm. The 130, driving east of the above shaft, on the main lode, is 5 ft. wide, producing stones of ore. This lode in the 120 is 3½ ft. wide, worth 12*l.* per fm. Sampson's stope, in the bottom of the 140, is worth 15*l.* per fm. Roberts's stope is worth 15*l.* per fm. Hocking's stope is worth 10*l.* per fm. Floyd's stope is worth 15*l.* per fm. Richards's stope is worth 10*l.* per fathom.

ALLT-Y-CRIB.—J. Hughes, Sept. 5: Shallow Adit: In the winze sinking under this level, on the north-west branch, the ore is holding down here 3 or 4 in. wide, and the lode appearing stronger.—No. 2 Adit: The first bunch by the winze will produce 7 or 8 cwts. per fm.; the end is poor at present; we have gone through 5 or 6 fms. of ore ground. We have men opening a stope in back of this end, which is not rich yet, but I expect it to improve.—No. 3 Adit: This lode is from 10 to 15 in. wide, composed of clay-slate and carbonate of lime.—Deep Adit: There is no alteration here, only we see little spots of copper and lead sometimes; the lode here is from 12 to 15 feet wide, but not regular. About 70 fathoms ahead of this end there is no doubt but that it will open the best and strongest ore ground which has at any time been worked in this sett; it was opened and worked on the surface, and as deep as the ancients could go with only hand labour.

ASHBURTON UNITED.—W. Edwards, Sept. 12: Hobson's Engine-shaft: The 78 cross-cut north to drive, at 12*l.* per fm., by six men; in this driving we have intersected three small branches, composed of capel, quartz, and a little mundic; the ground is become a little more favourable for driving. The 67 end east is suspended for the present, and the men put to rise against the winze sinking in the bottom of the 55; the rise set to three men and three boys, at 8*l.* per fm.; the lode is about 12 in. wide, and producing rich tinwork; the driving of this level west is also suspended, the lode being poor and greatly disordered. We have commenced cross-cutting south by four men, at 8*l.* per fm. The winze in the bottom of this level is set to four men, at 8*l.* 10s. per fm.; it is now sunk 6 fms., the lode is at present small, and yielding but little tin. The cross-cut south from the 55 east is set to three men and three boys, at 3*l.* per fm.; the winze sinking in the bottom of this level is set to six men, at 9*l.* per fm.; no lode has been taken down since the commencement. The 55 end, west of Parry's is set to one man and one boy, at 6*l.* 10s. per fm.; the lode is 18 in. wide, producing a little tin, on the whole poor. The 35 west is set to one man and one boy, at 2*l.* 15s. per fm., the lode is 2 feet wide, producing a little tin, and of a very encouraging appearance. The sheading has been continued in Storms Down, but no lode has yet been met with. In the tribute department we have at work thirteen pitches—six in back of the 67, east and west, at an average rate of 5s. 5d. in 1*l.*; four in back of the 55, at 12s. 2d. in 1*l.*; and three in old ground, at 13s. 4d. in 1*l.*—all at 60*l.* per ton standard. The tramming, filling, and landing throughout the mine is set to eight men, at 30*l.* per month, for two months, all cost to be paid by the men. The 12 new stamp-heads are fully employed, and the carpenters are busily engaged fixing an additional 12, completing the number formerly worked by the same wheel. The middle wheel is working 6 heads—total number 18, which is worked principally by the water pumped by the 20-in. repeating plunger. The lower wheel is in a very dilapidated state, and is now undergoing repairs.

BEDFORD CONSOLS.—Capt. Mitchell, Sept. 12: Saturday being our setting-day, the following bargains were set:—The middle adit level to drive east on the north lode by three men and three boys, at 3*l.* 5s. per fm., stented 3 fms. The lode at this point is about 18 in. wide, composed of soft spar, mundic, flookan, and a little saving work for copper ore. To drive on No. 1 south lode by two men and two boys, at 7*l.* per fathom. There has no lode been taken down at this point since last report. The cross-cut to drive south by four men, at 5*l.* 10s. per fathom, stented 2 fms. A pitch in back of the 27 fm. level to two men, for one or two months, at 12s. in 1*l.* All the traming for one month at 7s. in 1*l.*

BEDFORD UNITED.—J. Phillips, Sept. 10: The lode in the 115 west is 2 ft. wide, worth 1½ ton of ore per fm.; the lode is looking more promising than for some time past. The lode in the winze sinking in the bottom of this level is worth 3 tons per fm. The lode in the 103 west is 2½ feet wide, worth 3½ tons per fm. Yandell's and Manuel's stopes, in the back of this level, are worth 4 and 3½ tons per fm. Woolcock's stopes, in back of the 90 west, are worth 3 tons per fm. The lode in the 58 east is 18 in. wide, unproductive. The lode in the 47 fm. level west is 2 feet wide, composed of spar, mundic and stones of ore.

BICKLEIGH VALE PHŒNIX.—John Hambly, Sept. 12: Since my last report the managing director has been at the mine frequently. We are now driving north on the cross-course, and have driven through another small branch; we have gone through the lode and branches between 20 and 30 feet altogether, and, from the appearance of the water, I believe there is yet more before us; the ground is harder than I have seen it before since we have been driving on the cross-course; and, owing to the water, the men find a difficulty in blasting.

BORRODALE.—Wm. Dixon, Sept. 12: The workings on the Grand Pipe excavation, where we have two men, have yielded 6 lbs. of first quality black lead this week. The driving below Gill's stage, where we have four men, continues favourable; the lead obtained from this point is 4 lbs. of first quality and 10 lbs. of second, and from the indications there is a probability of discovering more. At Gill's stage we have two men cross-cutting to a vein east of Leek's vein, which has a very waddy appearance. We have had an enquiry from a manufacturer respecting our second quality black lead.

BRONFLOYD.—J. Lester, Sept. 12: The north lode, driving in the 40, is progressing well by six men, at 4*l.* per fm., now west of cross-cut about 3 fms. The winze coming down from the 17 to meet the 40 is down about 7½ fms., and is now in good ground for progress. The rise above the 17 is without alteration. Thompson's Cross-cut: The south lode was intersected on Monday last, and has proved a good lode so far as opened upon; the ground is hard, but it is mixed throughout with lead, and I have but little doubt we shall have a good lode. I shall, however, be able to say more about it next week. We have six men cutting through the lode as fast as possible: it is most important for the interests of the company, for if it cuts through and opens well we can reach the same lode by short cross-cuts from the adit and the 40, which will respectively be 17 and 29 fathoms deeper.

BRYN GWIOG.—J. Lloyd, Sept. 10: Since last advised the lode in the engine-shaft has greatly improved, and will produce from 3 to 4 tons of ore per fm., and looks fair for further improvement. The stope east of engine-shaft, and under the 132, will yield about the same as when last reported—1 to 1½ ton per fm. The 132 west is suspended for a fortnight, and the men are set to raise up from that level to meet No. 2 winze, so as to expedite holing through for ventilation, &c. The stope east of No. 1 winze has also improved, and well worth 4 to 5 tons per fm. The stope west of No. 3 winze is equally good, and will yield 4 to 5 tons per fm. The 105 west is without any change.

BRYNTAIL.—J. Roach, Sept. 12: The 10 is generally yielding a little lead ore, but not to value. The rise above the 10 is in a vugh, which is producing magnificent stones of ore. It is reasonable to suppose that the 25 will yield well under this ground. The 25 cross-cut appears to be in a mass of lode stuff; we are making good progress in driving, and hope soon to reach the north wall, but in the winze under the 10 it is underlying fast, and in which the flow of water is so great as to prevent us from sinking it deeper. This we shall communicate with as soon as we have driven under it. I believe the 25, west of the cross-cut, will soon be driven into a good lode of ore; at least that may fairly be calculated upon from the appearances of the lode driven through in the 10 fm. level.

CAMBORNE CONSOLS.—W. Roberts, Sept. 11: Tutwork set on Friday last:—The 50 to drive east on the caunter lode, by four men, at 8*l.* per fm. The 50 cross-cut north from caunter by two men, at 5*l.*, and the 50 cross-cut north from Wheal Gons shaft by four men, at 10*l.* per fm. The 33 west, on the caunter, by four men, at 6*l.* A rise in back of the 33, on the cross-course, by two men, at 4*l.*, and the adit to drive west on silver lode, by two men, at 5*l.* per fm.

CASTLEWARD.—Capt. Tabb, Sept. 9: The 20 end has been extended about 14 fms south-east from engine-shaft; the ground is composed of light clay-slate, with intermediate patches of dark compact clay-slate, the vein being about 10 in. wide, which consists of flookan and lead ore; the end is worth on an average about 7 cwts. of lead per fathom. The vein appears to be much better defined at the 20 than at the 10; and the bottom of the 20 holds out hopes that the ore will be found more abundant at the deeper levels. The 20 end, driving north-west from shaft, is in compact quartz, mixed with clay-slate; this end is very wet, and is draining the incline shaft. Our shaftmen are engaged in getting the shaft ready for drawing the stuff by the aid of the engine.

CATHEDRAL.—J. Webb, Sept. 11: Since our last report we have made good progress in clearing the adit level, and hope in a few days to complete this work. We have not been able to do much on the lodes for the last week, on account of the want of ventilation, and we have thought it advisable not to push these operations for a few days until the adit has been quite cleared. I think when the adit is cleared it will be very desirable to sink one or two grass shafts on the course of the lodes, for the purpose of ventilation, and for better developing the mine. I have no doubt but that when this is done returns would be made to pay the costs at the adit level. The more I see of this mine the more I am convinced of its becoming fully as productive as any of the mines by which we are surrounded.

CEFN CILCEN.—J. Williams, Sept. 11: The 73 yard level, driving east of whim-shaft, is just the same as reported last week. The rise above the 73 yard level continues to produce good saving work; the ground is favourable for rising and encouraging, and by all appearance will turn out well in each end of the said rise. The 60 yard level, driving east of the footway shaft, is not looking so well for ore as last reported, but the ground is easier for driving, and more cross joints appear coming in from the north side, and when we get through these joints to the settled ground I have no doubt that we shall meet with ore again in this end. We shall complete the water lodge under the bottom the whim-shaft next week. The eastern shaft is progressing satisfactorily, easy for sinking, and the lode is 6 feet wide, composed chiefly of spar, clay, and lead ore. This lode is a splendid one, and will now about pay for sinking by the yield of ore therefrom. There is not any alteration of importance in any other part of the mine.

CENTRAL MINERA.—Wm. Davies, Sept. 11: The shaft sinking on the red vein is going down with all possible speed; the ground is a little harder than last week, and the water is still very favourable. At Pugh's shaft, the cross-cut driving for the great north cross-course is going on very well; the ground is favourable, with some stones of lead occasionally. The cross-cut in the 35 is stopped for the present, and the men removed to the 55 to drive a cross-cut to intersect Pugh's shaft, which we have commenced this morning, so as to ventilate the great north cross-course. The stopes in the back of the 55, east

CLARA UNITED.—J. Lester, Sept. 11: In the 32 the western end is of equal value to last report, while the eastern end has rather improved for ore. The winze sinking below the 20 is progressing well; it is now down 7 fms., and the stuff raising therefrom is a good mixture of lead ore, with blende and quartz. We intend to-morrow to take the men from the western end of the 32 to rise up to meet the winze, so as to get this through as quickly as possible, ventilation being much required. The 20 east is being driven forward towards, and to come under, the boundary shaft of Ponterwyd. We are progressing with the surface works, and are making good floors for our future operations.

CROWLWM.—J. Roach, Sept. 12: In the winze sinking under the adit, which will in a few days be under the base of the hills, we have this week raised a small quantity of solid lead ore, found in bunches; the sink has a very promising appearance, and as it is deepened we expect the quantity of ore will increase.

CUDDRA.—F. Puckey, E. Dunstan, Sept. 11: The 100, driving west of Tickel's shaft, is without change; the ground is still easy for driving. The lode in the stopes in back of the 60, east of Walker's shaft, is still continuing its large size, and producing on the average from 1¼ to 2 cwts. of black tin to the 100 sacks; in the same level, west of the shaft, there is no lode taken down in the end or the stopes since last reported. Walker's shaft is still sinking through the lode, which at the present time is spare for sinking. We have this day put more men to stope the back of the 60, in order to raise more work for the stamps. The burning-house is now in good working order, and we shall soon be in a position to clean tin.

DEEP LEVEL.—J. P. Thomas, W. T. Harris, Sept. 12: In Lankshear's level we have got through the bed of shale, and are now in chert. In driving the level in the gravel bed we have come into an old shaft which had run in, and in clearing the stuff we find fine lumps of solid lead ore from 20 to 30 lbs. weight. At the Lake shaft we have come to the bottom, and in blasting one hole the water left us. We shall resume sinking this shaft next week.

DEVON UNION.—Z. Williams, J. Donnal, Sept. 11: The lode in the 40, west from engine-shaft, is about 2 feet wide, and of a very promising appearance; the stratum in which it is embedded is a light clay-slate, highly congenial for the production of copper ore; judging from the present appearance, we might reasonably expect a favourable improvement here very shortly. In the lode in the 28 we have a decided change for the better; we have now a lode coming in from the north, which will form a junction with the other lodes in about 8 or 9 ft. further driving, and from present appearances of each of these lodes we should think they could not fail to make a deposit of ore: this end is now getting into a very promising piece of ground, in which we have not the slightest doubt our efforts will shortly be attended with success. There is another good feature we would again refer you to—the lode seen to the north in the level above, which we should strongly advise to be cleared up. Quick's shaft is still in a very congenial stratum of ground; we have intersected and passed through a small branch, composed chiefly of mundic and quartz, dipping towards the lode; this we deem a favourable indication for copper at the next level. In conclusion, we have no hesitation in saying that the prospects of the mine are such that our operations will be attended with successful results.

DULTA.—J. Martyn, Sept. 10: Dyer's lode is now 7 ft. wide, and producing good work for tin. The lode is improving the further we go east, and there is no doubt of a still greater improvement as we get near the killas. Shimmin's lode is 4 ft. wide, producing capital work. The spar lode is still yielding good tinstuff. Butt's lode is not yet quite settled, but the branches are letting out a quantity of water. The night core have just come up from underground, bringing with them some splendid stones of tin, and say that the lode is looking better than ever. We are stamping all we can, and the work is turning out capitally. We want about 20 more stamps' heads attached, when we should be enabled to return several tons of tin regularly for the market. I have seen quite sufficient to convince me that, when a little more developed, Dulta will be one of the best paying mines in the county.

— Mr. C. Lee, of Chester (one of the directors), Aug. 28: I carefully examined the mine both underground and at surface. I find it very extensive, far more than I had thought, and as regards the machinery and surface buildings I consider great economy has been exercised, and no money thrown away. On going down the shaft I found it well timbered, and the following lodes intersected and partially wrought on:—Shimmin's lode driven on about 4 fathoms; Dyer's lode 7 fathoms; spar lode 8 fms. east and 5 fathoms west; and Butt's lode about 6 or 7 fathoms east. There are numerous veins or droppers from 1 inch and upwards in width, which will probably form good lodes in the next level; all these lodes and droppers appear to be tolerably good work for tin, and it is my candid opinion that a large quantity of profitable tinstuff can be raised from these—in fact much more than the present stamps can crush, even if worked night and day. There was a quantity of work on the floors which had passed through the stamps but was waiting to be dressed, and a large quantity of work unstamped. The dressing-floors were being laid out with racks, dredges, &c., requisite for cleansing the metal, and it appeared to me that all that is requisite to make Dulta Mine very profitable is extra power, which might be applied in shape of another boiler, and fixing additional stamps; for even had you 20 stamps at work night and day I doubt whether they would keep up with the large supply from these lodes when you commence stoping. For my own part I congratulate myself and fellow-shareholders on having (what I sincerely believe) a property which must, with the addition of a little outlay prove a continuous dividend mine.

DYFNGWM.—E. Davies, Sept. 9: I have considerable improvement to report since my last. The 50 has been driven further east through the barren ground, and has opened on a fine course of ore, which improves every day. The 32 east has also been driven through the long patch of barren ground, and has just opened on the orey part of the lode; as anticipated, the driving of this level will now be of weekly interest, as it will be going through the rich bunch of ore. The only end at present without ore in the 40, but the stope in this yields from 1 to 3½ tons per fathom, and as soon as the winze is holed, will continue to be driven, and will not be long in reaching the orey part. The ends of the 32, 50, 60, and 70 are all looking well, and the stopes in the backs as well. We shipped 23½ tons per *Dovey* packet.

EAGLEBROOK.—H. Tyack, Sept. 11: We are now down 2 fms. under the 10, in the winze 75 fms. west of the engine-shaft. You are aware we are sinking just at the foot of the hill, and where the lead has a westerly dip. In the eastern part of the sink the lode is not so rich as the western part, where there is a vein that would produce 25 cwts. of lead per fm. In the 20 the lode is exactly as last reported on. In the 30 west there is every appearance of our being very close to a good course of lead.

EAST BEAM.—J. Webb, Sept. 12: We have fixed bearers and cistern 10 fms. from surface, and placed an 8-inch lift in the same, all of which works well. The engine was put to work yesterday, and soon drained the shaft to the bottom. I cannot report the shaft as more than 12 fms. deep, the men having been employed several days during the past week putting down the pitwork. There is no alteration in the ground in the shaft since last report.

EAST CARN BREA.—T. Glanville, Sept. 11: In the 40 west the lode is 3 ft. wide, producing 6 tons of copper ore per fm. In the winze sinking below the 26 the lode is producing 3 tons of copper ore per fm. The other parts of the mine are without change.

EAST GUNNIS LAKE.—W. G. Gard, Sept. 12: The 36 continues to yield 5 tons of good ore per fathom, leaving a back and bottom of equal value. No. 2 winze is at present sinking by the side of the lode. No. 3 winze is worth 2½ tons of ore per fm. The cross-cut south from the 36 is without any change. In the 24 east we are driving by the side of the lode. In the deep adit no lode has been taken down since last reported upon. The cross-cut east of Gard's shaft, in the shallow adit, is without alteration. At Gard's engine-shaft we have, by the side of the main lode, a course of mundic, coated with ore throughout, worth 6 tons per fathom for the length of the shaft. The shaft is now down nearly 6 fms. below the shallow adit.

EAST ROSEWARNE.—J. James, Sept. 7: The lode in the 55 west is 15 in. wide, worth 12*l.* per fathom. In the 55 east the lode is 12 in. wide, worth 15*l.* per fathom. In the 55 the rise is worth 14*l.* per fathom. In the 43 west the lode is 1 ft. wide, yielding stones of ore. In the 43 east the lode is 6 in. wide, producing stones of ore. At King's shaft, sinking below the 22, the lode is poor. In the 53 winze the lode is 15 in. wide, worth 25*l.* per fathom. In the 22, north of King's, on north lode, the lode is yielding a little ore, but not to value. We have the elvans in the 55 west, and the lode seems much improved from the level above.

EAST TREFUSIS.—John Pope, September 12: The different bargains throughout the mine are progressing satisfactorily, without much alteration in appearance since my last week's report.

EAST WHEAL AGAR.—F. Pryor, Wm. Johns, Sept. 7: Dunsford's shaft is down 8½ fms. below the adit level, and we have to-day set the same to sink by nine men, at 16*l.* per fm.: during the last 6 feet in sinking this shaft the lode has undergone a considerable change for the better, and in the extreme bottom there is a beautiful loose gossan, which we may observe is of precisely the same character as the lodes that produced such riches in West Caradon. The adit level, west of Dunsford's, is set to drive by four men, at 11*l.* per fm.; there is also a beautiful-looking gossan in the bottom of this end, and the lode is producing occasional stones of rich yellow copper ore. We have sampled 4 tons of ore, making in all 8 tons. We are still of opinion that by continuing our present course of operations good results will follow.

EAST WHEAL GRENVILLE.—G. R. Odgers, Wm. Bennetts, Sept. 7: The lode in the engine-shaft is worth full 27*l.* per fm. for tin and copper, and it appears to be undergoing a change for the better, particularly in the eastern end of it, where the lode has every appearance of being on the top of a deposit of ore. The 35 west is looking more favourable, with good stones of ore, and showing every indication of good orey ground being not far distant. The 25 east is looking better. We hear that the West Frances adventurers have decided upon putting up a large engine on our lode in their sett, something like 100 fms. east of our boundary, and this we think to be an important point to us, tending as it will to throw great light upon our eastern ground, besides taking away some of the water.

EAST WHEAL RUSSELL.—J. Goldsworthy, Sept. 11: Homersham's shaft is in regular course of sinking below the 110; ground favourable. In the 110 east the lode is from 2½ to 3 ft. wide, composed of prian, peach, grey and black oxide of copper ore—produce 1½ ton per fm. In the 100 east, on the south part of the lode, the lode is 4 feet wide, composed of prian, peach, quartz, mundic, and a little black oxide of copper ore. The 100 east, on the north part of the lode, is suspended for the present. In John's winze, sinking below the 100, the lode is large, and produces 1 ton of ore per fm. In the 88 east the lode is 2 ft. wide, poor. In the 88, west of Hitchins's shaft, the lode is large; the part being carried is 4 ft. wide, composed of prian, quartz, &c., a very promising lode. In the 66 east the cross-cutting of the lode north has been commenced, but not enough done to speak of its quality or character. There is no change to notice in the stopes through the mine since last reported on.

FURSDON.—J. Hampton, J. P. Daw, Sept. 7: The lode in the 21 is more settled, and there is more ore in it. The 11 east and west are looking quite as well, if not better, and we are raising ore enough to pay the cost of the mine, and more.

GREAT CARADON.—F. C. Harpur, Sept. 10: Since my report for the last quarterly meeting, I beg to inform you we the south 40 fathom level cross-cut has been extended 15 fms., making the entire distance driven from shaft 40 fms. In the present end the ground is favourable for driving, consisting of killas, intermixed with veins of spar and mundic. About 16 fms. behind this end we passed through a lode bearing nearly east and west, and underlying north towards the shaft, in the course of which we drove west several fathoms, and found it to be composed of quartz, mundic, peach, mica, and stones of copper ore. I might here observe that in sinking the engine-shaft we passed through a lode underlying south, which will form a junction with the before-named lode, about 15 to 20 fms. below our present bottom. This is rather an important point, and I would advise that we at once commence sinking the engine-shaft to that level, when it is possible the influence of the two lodes meeting together may make a very favourable change. In order to carry out this desirable object, our expenses will be confined chiefly to labour. The shaftwork being in excellent working condition, we shall, therefore require a few quick pumps and some iron. The north cross-cut during the past quarter has been driven 12 fms., making the whole distance driven in this direction 36 fms. In this end we have just passed through another branch about 6 inches wide, consisting of quartz, mundic, and a little copper ore. The end is at present strongly stained with green carbonate of copper, which is considered a favourable omen. I would, in conclusion, recommend the continuation of the driving of this end by four men, and sinking the engine-shaft another lift by nine men as fast as possible. The engine, pitwork, &c., are all in good working order.

GREAT CRINNIS.—W. Woolcock, Sept. 12: The new shaft is now down about 9 fathoms 2 feet below the 110 in killas, on the north part of the lode, and we hope to reach the 120 by the end of next week. As the ground continues favourable for sinking the water has somewhat increased, but not so as to retard our progress. In the 100 west we have cut out a portion of the north part of the lode, in order to drive on that portion which we find the leader now to be upwards of 3 feet wide, saving work, and looking kindly for further improvement. In the 100 cross-cut during the week we have cut into a large floor of spar in the end which is letting out a quantity of water, and will cause our progress to be slow until we get through it. The ground in the 90 fm. level cross-cut is without alteration during the week. The tribute department throughout the mine is also without any material change, and the surface works are going on satisfactorily.

GREAT RETALLACK.—Sept. 13: *Telegram*: The 45 east has improved for lead and likely for further improvement.

GREAT SOUTH TOLGUS.—J. Daw, jun., Sept. 11: The lode in the 125, west of Lyle's shaft, is 2 ft. wide, producing some good stones of copper ore. The lode in the 100 west is 2 ft. wide, producing 1½ ton of ore per fm. The lode in the 80 west is 1 ft. wide, producing 1 ton of ore per fm. Other parts are much the same as last reported.

GREAT TREGUNE CONSOLS.—W. Richards, Sept. 12: The lode in the 80, west of Hobler's shaft, continues to be equally as promising as reported on last week, being full 4½ feet wide, easy for progress, and will yield about 1¼ ton of good copper ore per fm. We have resumed the cross-cut in the 60 west, by four men, in favourable granite for the production of mineral. The following are particulars of setting for the month of September:—The 80, to drive west of Hobler's shaft, by six men, stented the month, at 7*l.* per fm. A plat to cut in the 80, at Hobler's shaft, 11 ft. wide, 10 ft. long, and 7 ft. high, by two men, per bargain of 5*l.* The cross-cut, to drive south, in the 60, by four men, stented the month, at 10*l.* per fm.

GREAT TREVEDDOE.—James Polglase, Sept. 7: We are making good progress in sinking the shaft—down 10 fms., I think nearly to the bottom of the old workings. I have been in the old workings this week, but can see little else than old timber in the end of the shaft. Viewing it from that quarter, the lode is very large and very good, much larger than where seen in the end of the shaft. The lodes seem to be altogether at this point, and have made a bunch of mineral, or a large deposit. There is every appearance of a plentiful supply of tin and copper.

GREAT WHEAL ALFRED.—W. Bugelhole, W. Arthur, Sept. 11: Copper House Shaft: The lode in the stope in back of the 220, west of the shaft, is worth 16*l.* per fm. The lode in No. 2 stope, in back of this level, is worth 15*l.* per fm. The lode in No. 1 stope, in bottom of the 210, is worth 15*l.* per fm.; No. 2 is worth 20*l.* per fm.; No. 3 is worth 18*l.* per fm.; No. 4 is worth 12*l.* per fm. The lode in No. 1 stope, in the back of this level, is worth 9*l.* per fm.; No. 2 is worth 18*l.* per fm.; No. 3 is worth 20*l.* per fathom. The rise in back of the 210 is communicated with the new winze.

GREAT WHEAL BUSY UNITED.—John Delbridge, John Petherick, J. Bryant, E. Richards, Sept. 7: The sumpmen are engaged changing the pitwork at Harvey's engine-shaft. Fielding's shaft is communicated with the 120; we purpose putting in a skip line at this shaft from the 110 to the 120, and drive the 120 west with all dispatch. In the 120, east of Offord's, the lode is 3 to 4 ft. wide, unproductive; we purpose putting down the skip at this shaft to the 120 in the coming month. In the 110, east of Offord's, the lode is 5 to 6 ft. wide—a little copper ore, with low price tinstuff, throughout. In No. 1 winze, in bottom of the 100, the lode is yielding 12 tons per fm. No. 2 winze 6 tons per fm. The 100 end, east of ditto, yields 17 tons per fathom. The 90, Levett's winze, yields 14 tons per fm., with tinstuff; the 90, Kitlee's winze, yields 16 tons per fathom, with tinstuff; Mathew's shaft, below the 90, 17 tons per fm.; east of Mathew's shaft, below the 90, 8 tons per fm., with tinstuff. Mathew's rise is worth for tin and copper 40*l.* per fm. Mathew's shaft, below the 80, is worth for tin and copper 40*l.* per fathom. In the 80, east of Mathew's shaft, the lode is 7 to 9 ft. wide, yielding low priced stamping work; the lode in this level seems to be changed from the former driving. In the 70 the lode is 4 ft. wide, low priced tinstuff. In the 100, west of Fielding's, the lode is 3 ft. wide, yielding stamping work of low price; the lode in this level presents a favourable appearance, more likely to yield tin than copper. In the 90 rise, west of Rawling's, no lode taken down for the month, nor will be until we hole. In the 80 rise, at King's shaft, the lode is very wide—unproductive. In the 70 cross-cut north the ground, is favourable; we expect about 22 fms. more driving will cut Oate's lode. At Bocawen's we purpose working the engine in the coming week. Our buildings are progressing as fast as circumstances permit.

GREAT WHEAL MARTHA.—H. Rickard, Sept. 11: Our progress in sinking the engine-shaft during the past week has not been quite so great as on former reports, yet I hope to accomplish it to the required depth for a 52 within three weeks, when we shall commence driving towards the lode; the lode in cutting plat below the 20, at Thomas's shaft, still maintains its value as last week, 20*l.* per fm. The tribute pitches are much as usual. We have about 150 tons of copper ore already on the quay towards the next sampling, and still carrying away from the mine with all speed, so that I hope to have over 300 tons against the sampling day, Friday fortnight.

GREAT WHEAL VOR UNITED.—T. Gill, F. Francis, S. Harris, Sept. 11: In the 142 driving east of Metal engine-shaft, on the south part of the lode, the lode is about 3 ft. wide, worth 40*l.* per fm. In the 142, driving east of Metal engine-shaft, on the north part of the lode, the lode is 1½ ft. wide, worth about 30*l.* per fm. In the 142, driving west of Metal engine-shaft, we have not taken down any lode for the last week; the lode being large and wet we are obliged to drive by the side of it to drain it before we take it down. In the 132, driving east of Metal engine-shaft, the lode is 2 ft. wide and poor for mineral. In the winze sinking below the 132, west of Metal engine-shaft, we have not taken down any lode for the last week, therefore I cannot tell its value. In the 152, at Metal shaft, we have driven east about 2 fms. for a plat, and now we are driving south to cut the lode, and we expect it will not be long before we intersect it. We are making good progress in enlarging Ivey's shaft. We have cased Edward's shaft down to the bottom, and we hope to intersect the lode shortly. In the stopes in bottom of the 132, east of Metal engine-shaft, the lode is about 4 ft. wide, worth 60*l.* per fm. In the stopes in back of the 132, east of Metal engine-shaft, the lode is 4 ft. wide, worth 34*l.* per fm. The stopes in back of the 122, east of Metal shaft, are worth 8*l.* per fm. All our machinery throughout the mine is working very well.

GWYDYR PARK CONSOLS.—Capt. Smith, Sept. 12: We took down the lode in the deep adit yesterday, but it is not quite so good as last reported, in consequence of the splice dipping and disordering the lode for the present.

HAWKMOOR.—Jos. Richards, Sept. 10: The mine is in fork, and the machinery in good working order. The lode in the stopes in back of the 25, east of Rowe's rise, will produce about 3 tons of copper ore per fathom.

HINGSTON DOWN CONSOLS.—T. Richards, Sept. 11: The 110 west is more promising, producing some good stones of ore. The 100 west will produce 20*l.* worth of ore per fm. The 85 west will produce full 70*l.* worth of ore per fathom. No change at any other point.

HUCKWORTHY BRIDGE.—J. H. Rodda, Sept. 11: The lode in the engine-shaft, sinking below the 25, is 3 ft. wide, composed of capel, mundic, prian, and stones of ore. The lode in the 25 east has a very promising appearance, 2½ ft. wide, composed principally of quartz, mundic, prian, and spots of ore.

KELLY BRAY.—S. James, Sept. 7: The lode in the 75 east is 2½ feet wide, and will yield 2 tons of ore per fm., worth 5*l.* per ton. We have suspended the 55 east, and put the same pare of men to drive the 30 east in search of the course of ore we had in back of the 45 east, and am glad to say the lode is from 3 to 4 feet wide in the above-named end, yielding upwards of 1 ton of good ore per fathom. The tribute department is, on the whole, a little improved, and if the same prospects continue as at present, the sampling will increase.—Eastern Mine: The lode in the 70 east is 2 feet wide, composed of quartz, mundic, and spots of ore, and the ground is easy for progress; set at 7*l.* per fm. The lode in the winze in bottom of the 60 is still looking very promising, yielding about 3 tons of rich ore per fm. for the length of the winze, 2 fms. long, but the water is very quick, which much impedes our progress. In the 60 we are still cross-cutting south, and have in the past week met with several branches, but we are not yet satisfied the main branch is discovered, or the part of the lode which split off south some 7 or 8 fms. west; the ground is strongly mineralised with branches containing mundic and copper.

LADY BERTHA.—Capts. Harpur and Metherell, Sept. 9: In the 53 east the ground is moderately easy for driving through, and has a very congenial appearance; this end is now from 6 to 8 ft. east of the cross-course; we propose driving some few feet further, and then cut through the lode in order to ascertain its correct breadth and composition. In the same level west the ground is also easy for exploring. In the 41 east the lode is increasing in size, composed of mundic, peach, and spots of ore, letting down a good stream of water, in fact it has drained the level over the 30 quite dry; this we consider favourable, and leads us to hope for some good improvement in this place shortly. The men belonging to the stopes in this level west are just now rising above the back to communicate with the stopes, which will facilitate our progress in taking away the ore, where the lode is worth about 20*l.* per fm. In the 30 east we are still extending the cross-cut north in search of another portion of the lode, which may be standing in that direction. The lode in the winze, sinking below the 30 west, is about 4 ft. wide, composed of quartz, mundic, peach, and ore, worth of the latter 3 tons, or 18*l.* per fm. In the 20 east we are driving by the side of the lode. The lode in the 10 east is from 4 to 5 ft. wide, consisting of peach, mundic, and ore, worth 1 ton, or 5*l.* per fm. The tribute department continues to yield much the same as for some time past.

— Capt. Metherell, Sept. 12: In the 53 east the ground is very easy for driving. We shall commence this afternoon to cross-cut the lode. No alteration in the 53 west. In the 41 west the water is oozing very strongly, which has drained the level above; this we consider very promising. The stopes in the 41 west are of the same value as last reported. In the 30 east we are still cross-cutting north, in which the ground is moderate. Curtis's winze, in the bottom of the 30 west, is down about 2 fms., in which the lode is 5 to 6 ft. wide, worth 3 tons, or 18*l.* per fm. In the 20 east we are still driving by the side of the lode. The lode in the 10 east is 4 feet wide, worth 1 ton or 5*l.* per fm. On the whole, there is a little improvement in the tribute department.

LEIANT CONSOLS.—J. Williams: We have extended the 25 fm. level 5 fms. east and 5 fms. west, cut plat, &c.; the lode here retains its usual character, 4 ft. wide, producing good stones of tin, more especially the eastern end; we expect by driving this end 2 or 3 fms. further the lode will be more productive. The 15 is driven 40 fm. east through tinny ground; the lode is 6 ft. wide at present, and is disordered. The stopes in the back of this level are producing a fair quantity of tinstuff of average quality; this level west is for the present suspended, in order to sink a winze to the 25, for the purpose of ventilation, the air being insufficient to enable us to sink and drive at the same time. We have nothing new in any other part of the mine.

LOWER PARK.—W. Davies, Sept. 11: At the Paddock shaft, in the 20 yard level, driving south, the end has become much harder, and strings of spar through it, which we consider a good indication for lead. The shaft at the back of the office is to the depth of 27 yards. We have come to a level driven on the vein east and west, with a little ore in both ends; it is our intention to continue the sinking of this shaft until we get sufficiently under the old workings before putting out from the shaft. The cross-cut driving south from the west shaft is much the same as last week

MAUDLIN.—J. Tregay, Sept. 11: South Mine: The lode in the east end is at present small, with peach, spar, mundic, and spots of ore.—West Mine: The new shaft is now down upon the back of the lode, but we cannot yet tell its size. I hope to be able to report more fully by Saturday.

MOLLAND.—T. Bennetts, Sept. 10: The lode in the 32 east is very large and hard, it being now 7 feet wide, consequently we shall be obliged to leave a part of it, and cut through it occasionally if required. The small leader of ore referred to in my last is looking much the same. In the 20 east the lode is 1 ft. wide, with good spots of ore in it, and underlying north about 2 feet in a fathom. In the end it looks more promising for producing ore than for some time past. The stopes in the bottom of this level are producing much the same quantity of ore as last week—1¼ ton per fm.

NANTEOS AND PENRHIW.—H. Boundy, W. Paull, Sept. 9: On Saturday last the following bargains were set:—Eystumtean: The 10 to drive east by four men, at 7*l.* 10*s.* per fm.; the lode is about 4 ft. wide, composed of clay-slate, spar, mundic, and lead ore, yielding of the latter about 10 cwts. per fm. The 10 to drive west by four men, at 7*l.* 10*s.* per fm.; the lode in the end is 3 ft. wide, with a slight mixture of lead ore, but at present not sufficient to value. The winze below adit to sink by four men, at 7*l.* 5*s.* per fathom; the lode is large, and yielding stones of ore occasionally. This winze we expect to communicate with the 10 in about two months, which will make this piece of ground available for stoping. Four men are employed in cutting ground and making the necessary arrangements for the drawing machine; this we hope to complete in about a month, when we shall be able to draw the stuff very cheaply.—Bwichgwyn: The 30 east to drive by four men at 5*l.* per fm.; the lode is 18 in. wide, composed of mundic, blende, spar, and lead ore, yielding about 8 cwts. per fm., and letting out a quantity of water. In referring to your letter of the 5th inst. we most certainly approve of the tribute system generally, and we have hundreds of fathoms of ground laid open that can be taken away at a profit to the shareholders, should the price of ore advance to (say) about 12*l.* per ton; but would it not be advisable to suspend all stoping and tribute for the present, until an advance in the ore takes place, for we find, by carefully going through the matter, that we are not realising 1*d.* profit from the ore we sell under the present price? By driving the above-named level, and other necessary work, we are likely to open fresh ore ground, which will enhance the value of the mine without incurring any further loss to the mine than at present. We shall prepare the ore already broken for market, and not set any stopes or pitches until we have your reply.—In answer to your letter of the 3d inst. I beg to say that the lode is more compact, and less corrupted with mundic in the 10, both east and west, than in the levels above. We shall be able to make returns from this part as soon as the winze is communicated with the level. I cannot satisfactorily answer your question respecting the south lode at Bwichgwyn at present, as the level is choked, but will do so shortly.

NEW BIRCH TOR AND VITIFER.—Capt. Symons, Sept. 6: The lode in the 24 west is much the same as in the level above—divided into branches, which produce good work for tin. We have suspended the driving of this level for the present, and have put the men to rise in the back of the same; we calculate within two months to communicate this with the 12 fm. level, which will lay open good tribute ground, after which we shall be in a position to let this ground on tribute. The lode in the 24 east is about 1 ft. wide, the water issuing from it very strong; it is promising, but poor. The lode in the 12, west of Hambly's shaft, is split into branches, and consequently in a very unsettled state. The pitches, on the whole, are much the same, producing fair work. Lance's shaft is sunk below the deep adit level 8½ fms.; the lode at present is small, and the ground producing a little tin, but with indications of improvement. In the deep adit level east the ground is hard, and the lode still poor. We do not expect a change in the lode until the stratum changes, and from what we have seen in the level above we expect an alteration shortly. In the deep adit level west the lode at present is small, producing good stones of tin, and laying open tribute ground. We have set a rise in the back of this level to communicate with the air-shaft, being prevented from sinking the latter in consequence of the water; by calculation we have about 10 fms. to communicate. The pitches in this part of the mine are much the same as for some time past. Our returns for the ensuing month will be 8 tons of tin.

NEW CROW HILL.—Sept. 13: We have cut through the lode at the 35 north, and have the flookan, and are stoping the back with good work for stamps. No alteration in the 15. The ground in shaft as last reported. We hope to work the stamps next week.

NEW WHEAL FRANCES.—C. Carkeek, J. Tredinnick, Sept. 12: Dunsford's engine-shaft is now down 4½ fathoms below the 10, in the bottom of which the lode is 10 inches wide, and worth 35*l.* per fm. for the length of the shaft; this shaft is sinking at 17*l.* per fathom. The 10, west of engine-shaft, is driving by four men, at 7*l.* 10*s.* per fm.; the lode in this end is split in two parts, which are about 2 feet asunder, each branch containing a little tin; we may expect and improvement in this end as these branches near each other. In a winze sinking below the deep adit, and about 2 fathoms in advance of this end, the lode is 15 in. wide, and worth 8*l.* per fathom. The different stopes continue to produce about their usual quantity of tin. We have commenced a new winze in the bottom of the 10, about 10 fms. east of engine-shaft; the lode in this winze was rather poor for the first 3 feet sunk, but we find to-day it is very much improved, and we feel satisfied it has already reached the rich shoot of tin we have been sinking on in the engine-shaft; this winze is now worth full 10*l.* per fm., and we have no doubt it will bear a higher valuation in our next report. Our surface work and dressing are going on very satisfactorily, and we are very busy preparing another parcel of tin for sale.

NORTH BASSET.—T. Glanville, G. Davey, Sept. 11: In the flat-rod shaft the lode is 2½ feet wide, yielding good stones of copper ore. In the 132, west of the cross-cut, the tin lode is 2 ft. wide, worth 6*l.* per fm. In the 102, west of Lyle's shaft, the lode is 3 ft. wide, composed of spar, mundic, and good stones of copper ore. In Grace's shaft the lode is 4 ft. wide, with a leader on the north side, producing 2 tons of copper ore per fathom. In the 82 west the lode is 18 in. wide, worth 8*l.* per fm. In the winze under the 72 the lode is 2½ ft. wide, producing ½ ton of ore per fm. In the winze under the 30 the north lode is 1 ft. wide, yielding stones of ore.

NORTH BULLER.—J. B. Delbridge, Sept. 7: In the 78 west the lode is 8 to 10 inches wide, yielding good stones of tin, ground favourable for driving. In King's flat-rod shaft the lode is 10 to 14 in. wide, being composed principally of quartz, mundic, and yellow and black copper ore—ground favourable for sinking. In the 42 east the lode is 18 to 20 inches wide, composed of mundic, iron, and tin, spotted with yellow copper ore; ground favourable for driving. In the 42 west the lode is small at present. In this part of the mine we have not much water. Rods not at work now. The engine and pitwork at the engine-shaft are working well.

NORTH BUDNICK AND WEST MOUNT.—J. Tonkin, Wm. Johns, Sept. 10: We have extended the deep adit about 14 fathoms since our last general meeting. In the last 3 fathoms the lode is very much improved, it has produced some good stones of tin, and about 10*l.* worth of copper. We find some kind of mineral in every branch we cut. We have also sunk two shafts about 3 fms. deep each, on the back of the great lode, now about 15 fms. before us; we found the lode 4 feet wide, containing gossan, prian, and a small quantity of phosphate of lead, and we hope that this lode when cut will remunerate the adventurers for the outlay incurred.

NORTH DOLCOATH.—In the 35 we have driven west of shaft 9 ft.; lode now about 5 ft. wide, yielding occasional stones of yellow copper ore, and letting out much water; set to drive this day at 2*l.* 15*s.* per fm.; in the same level we have driven east 2 fms. 3 ft.; lode 3 ft. wide, producing beautiful stones of lead, and spotted with copper, presenting a very pretty appearance; set this day to drive at 3*l.* per fm. In the 20 east we have driven in the past month nearly 5 fms.; the lode in the present end is about 2½ ft. wide, yielding good stones of yellow and black copper ore; set to drive at 2*l.* 5*s.* per fathom.

NORTH DOWNS.—Sept. 11: All our tutwork operations are progressing satisfactorily, and there is no alteration to notice since last report. Our pitches and stopes are looking well. We have sampled 314 tons of superior quality copper ore.

NORTH HAFOD, OR DEVIL'S BRIDGE.—M. Francis, Sept. 11: I have carefully gone over your property here to-day, and am perfectly satisfied with the result of my inspection; some of the veins are the strongest and most beautiful of any that I have met with in the course of my mining experience. I first examined a lode that has hitherto been called the middle lode, which I suggest in future shall be called Spargo's lode; there is a great quantity of water coming out of a large mass of carbonate of lime, forming the upper or surface crust of this vein, and as I am quite satisfied that this is the outcrop of a great formation of ore, we have determined to erect machinery upon it, and sink a shaft without any delay. I consider the first thing in good mining is to make a selection of a good spot, and after being satisfied that there is every probability of securing a good mine to work at it manfully, and without any reserve; we have, therefore, carefully gone over the ground, and arranged to bring down a stream of water from the Bodcol brook, and erect a water-wheel about 60 fms. from the proposed new shaft. It is my opinion, from the black oxides and chlorates of lead mixed with and colouring the carbonate of lime, that we shall have but a small depth to sink before coming into a deposit of ore; I will not say what the nature or extent of the ore ground may be, but the lode-stone is so identical with the Frongoch veinstone that no person can tell the one from the other, and we can trace the lode all the way to the Frongoch Mine, and as a further proof that we have the ore ground we placed specimens of crystallisation of the lode from your mine, Frongoch, and Llaneither together to-day, and we could not tell one from the other, and I am persuaded in all their qualities they are quite identical. I also examined another opening upon the north lode, and I certainly never saw a finer back to a lode so near the surface; the vein is full of a peculiar kind of lodestone, capping all the great masses of ore in this country. I am quite satisfied a very little sinking would bring us into a mass of lead ore here also, but I think it will be wise to confine our operations to one deep mine in the first place. Rhew Gotta is a very remarkable piece of ground on the line of the veins, and evidently where they form a junction I think there cannot be a doubt but that there are several great formations of ore in this grant, and the veins must be opened up in various places by trenches and occasionally deeper trials; at the same time I should not advise you to carry on these trials too profusely, but rather fix first to confine the expenditure to one well-selected site. We are all well agreed that the trial we have selected to follow down is one of the best in this grant, or any of the district that has come under notice, and I recommend you to proceed to explore the lode here as rapidly as circumstances will admit.

NORTH HALLENBEAGLE.—James Crase, Aug. 31: Bingley's engine-shaft is cut down 3 fathoms below the 10, as well as cleared of slime and rubbish 2 fathoms 2 feet below this depth. In cutting the cistern-plat at the 10 a lode has been discovered standing entire, about 2 ft. wide, good saving work; and when the shaft is cleared to the bottom of the old workings, which I expect will be accomplished by the end of next week; the lode will then be taken down, when I shall have a better opportunity of reporting more fully on its value; I consider it an important discovery, which will enhance the value of the mine. This week I have had drawn up 1 ton of good quality ore from the lode at Wheal Barbary, and have now at surface from 4 to 5 tons of copper ore, worth about 6*l.* per ton; the lode at this part of the mine is looking well; there are three more copper lodes of equal promise between this lode and the engine-lode, which have been intersected by a cross-cut, and which it will be necessary to have cleared at once. I am happy to state that I never have had a better opinion of the prospects of the mine than I have at present. The company have only to open the different lodes, when there can be no question of their being rewarded by a first-rate dividend-paying mine. It is now necessary to commence our ore floors, dressing-house, &c., in order to prepare the copper ores for the market.

NORTH JANE.—C. R. Webb, S. Sims, Aug. 7: At the usual monthly setting, held this day, we have set the following bargains, &c.:—Kerr's shaft to sink by eight men, at 13*l.* per fm. The 20 to drive west of engine-shaft on the lead lode by two men and two boys, at 3*l.* per fm. The 12 to drive east of gossan shaft, on the tin lode, by three men and three boys, at 6*l.* 6*s.* per fm. The 12 to drive west of gossan shaft, on the same lode, by two men and two boys, at 5*l.* 15*s.* per fm. A winze to sink in bottom of the adit level, east of gossan shaft, by four men, at 6*l.* per fm. Two pitches in back of the 12, at 12*s.* in 1*l.*, by six men. Kerr's shaft is now down 72 fms. below the deep adit, and we intend to sink the same 3 fms. deeper before fixing the lift; then drive a cross-cut north to cut the lode, all of which we shall complete this month, if not hindered by the water. In the 12, east of gossan shaft, the lode still continues productive, worth 100*l.* per fm. for tin. The same level west is worth 5*l.* per fm. for tin. The tribute pitches and all other parts of the mine are looking just the same as when last reported on. We shall have 4 tons of tin ready for sale in a fortnight.

NORTH NANT-Y-MWYN.—J. Thomas, Sept. 12: The lode in the western end is about 4 ft. wide, composed of a kindly spar, a beautiful blue flookan, white prian, with good spots of copper and silver-lead ore; there is a stream of water coming out from the end, which I consider is a good sign for a speedy improvement. The men are cutting the side of the level to make room for sinking. I intend to sink about 8 or 10 fms., and am confident that we shall raise a great quantity of lead ore in sinking, as the ore is to be seen in the bottom of the level holding down well: the former workers must have returned great quantities of ore in driving this level and stoping the backs, as they worked away the ground nearly to surface; from all appearances this lode will improve in depth, it being well defined and mineralised throughout. We are preparing our dressing-floors, and shall shortly commence dressing ore for the market; this will show the true character of the mine, and prove all my former reports.

NORTH MINERA.—T. P. Thomas, W. T. Harris, Sept. 12: The eastern shaft is down 9 fathoms, and we have got through the shale, and are now sinking in a very congenial looking chert for ore. At Wilson's shaft, driving north on the north and south lode, the ground is looking very favourable, and will produce about 2 tons of lead ore per fathom; in the south end it is very much improved, a fine branch of ore having been cut into; not having done much on it we cannot estimate its value, but shall be able to do so in our next report. The flat at Pugh's is as productive as usual, but is too extensive to value at per fathom, and can be best estimated by monthly returns. We sold on Saturday last, to Messrs. Newton, Keates, and Co., 40 tons of ore, at 11*l.* 12*s.* 6*d.* per ton; and we weighed it off and delivered it into the railway trucks yesterday. We can congratulate the shareholders upon having got so good a price for the ore, it being equal to Minera and superior to the Lisburne and Cwmystwith ores, our previous sales having been considerably below those mines. Our round buddle commenced working

ance; the ground has changed into a light blue killas, the underlie is not so great, and the lode bids fair for further improvement. The 32 cross-cut has not yet reached the branch; we expect to cut it about 8 ft. more. All the machinery is in good order, and working well. Our dressing department is going on satisfactorily.

OKEL TOR.—W. B. Collom, Sept. 12: In the 80 there is a large lode forming in the end 4 ft. wide, of soft spar, mundic, and ore, and yielding of the latter 3 tons to the fathom. The stopes in the back of the 80 will yield 3 tons of ore to the fathom. In the 65 the stopes in the back are yielding 10 tons of ore to the fathom. In the end at the 50 we are cross-cutting through the lode. The stopes in the bottom of the 50 are yielding 12 tons of ore per fathom. The three pitches in the back of the 50, now working at 10s. in 1l., are looking very well.

PANT-Y-PYDEW.—R. Nankivell, Sept. 12: In the end driving west of whim-shaft the lode is 1 ft. 8 in. wide, producing good stones of lead ore. I have ordered the men to-day to save the whole of the lode. By all appearance we are getting into good ovey ground. In the 54, east of whim-shaft, on the south lode, the lode is 2 ft. wide, composed of grit, carbonate of lime, and spots of lead ore.

PAR CONSOLS.—F. Puckey, T. Rich, J. Hosking, Sept. 9: In the eastern or copper part of the mine some of our ends are a little improved, although we have not large courses of ore at present, yet we are opening out some fair tribute ground.—Stephen's Lode: In the 100, west of the underlie shaft, we have cut the lode west of the cross-course, which is 2 ft. wide, worth 8l. per fm. In the 110 west the lode is 2 ft. wide, worth 8l. per fm. In the 120 west the lode is 3 ft. wide, worth 18l. per fm. The lode in the winze sinking below this level is 1¼ ft. wide, worth 10l. per fm. In the 135 west the lode is 4 ft. wide, producing saving work. The lode in the winze sinking below this level is 4 ft. wide, worth 16l. per fm. In the 165 west the lode is 2 ft. wide, producing saving work, but not sufficient to value. In the 170 east the lode is 4 ft. wide, worth 12l. per fm. The lode in the 180 and 200 fm. levels east is still poor.—Western or Tin Part: There are no alterations to notice in this part of the mine since our last report. Our stopes and pitches are producing about 26 tons of tin per month.

PEDN-AN-DREA.—Wm. Tregay, T. Delbridge, J. Thomas, Sept. 7: The engine-shaft is sinking below the 110 as fast as possible; lode large and coarse. In the 110 east end the lode is large—no wall—producing good stones of tin, and improving. The 100 east is poor. The rise in back of this level is worth 20l. per fm. The stope in the bottom of this level is worth 60l. per fm. In the 90 west end the lode is poor. The 90 rise is worth 35l. per fm. The 90 west, on Skimmer's lode, is worth 5l. per fm.—Street and Bragg's: In the 47 east end the lode is 4 ft. wide, promising for the production of tin. The 40 east is worth 8l. per fm. We sold to-day 10 tons 6 cwts. 3 qrs. 9 lbs. of black tin for 678l. 18s. 10d.

PENDEEN CONSOLS.—Wm. Eddy, Jas. Warren, Sept. 7: The lode in the engine-shaft, sinking under the 130, is 18 in. wide, producing good stones of ore; it appears to be the top of a new bunch of ore; we shall take down the lode before next setting-day, when you shall be fully advised of its value. The lode in the 130 north has a more promising appearance, producing stones of ore, but not to value; this end is getting under the run of ore gone down in bottom of the 118. The 118 north is still hard for driving; lode about 2 ft. wide, worth 10l. per fm. In the stopes in back of this level there is no change to notice. In the 106 south the lode is 5 ft. wide, composed of spar, mundic, tin, and copper, being at present the most productive for copper. The stopes at this level, north of shaft, are producing about 2 tons of ore per fm., worth 8l. per fm.

PENHALDARVA.—J. Pope, Sept. 12: In the 60 north the leader part of the lode is 10 in. wide, composed of soft spar, mundic, and prian, with good spots of lead. In the 50 south the lode, or leader part, is 12 in. wide—unproductive. In the 50 north the leader part of the lode is 9 in. wide, spotted with lead. In the winze sinking in the bottom of the 50 north the leader part of the lode is 15 in. wide, producing saving work for lead. We have cut through the lode in the 60 north and south, which is from 8 to 9 feet wide, but nothing in it to value.

PENHALLS.—R. Pryor, sen., J. Gibble, Sept. 7: The lode in the engine-shaft sinking below the 30 fm. level is yielding good stones of tin. The 30, east of engine-shaft, is letting out more water, and has a more promising appearance than for some time past. The 30 cross-cut is driven north of shaft 9 fms., at which point we have cut a lode 1 foot wide, and is worth 11l. per fm. We intend driving 3 ft. further north, and then to open east and west of cross-cut on this lode. The lode in the 30, west of shaft, is 18 in. wide, but at present poor. The lode in the 20, east of shaft, is 1 ft. wide, producing stamping work. The 10, east of shaft, is worth full 10l. per fathom. The lode in the 10, west of ditto, is still disordered by the slide; the winze behind this end is communicated to the level below.—South Lode: The lode in the 20, west of cross-cut, is 2½ feet wide, of a more promising character, but not to value.—Western Shaft: The 30 is cleared east of this shaft 25 fms., and we find all the ground has been taken away from the back and bottom of this level by the former workers; no time shall be lost in pushing on the clearing of this level to communicate with the 20 driving west from the engine-shaft. No change to notice in any other part of the mine.

PROSPER UNITED.—W. H. Martin, Sept. 12: At Hosking's engine-shaft we hope this week to complete the plunger-lift, which is being fixed at the 20; we shall also put in bearers, &c., to enable us to drop the lift below; this, when accomplished, will place us in a favourable position for speedily draining this part of the mine to the 40. At Louisa's engine-shaft the sumpmen are engaged removing the ground at the 30 for bearers and cistern-plat, preparatory to fixing the plunger-lift at that level, which we purpose commencing the latter part of next week. We have cleared and made secure the 30 to the present end, east of Louisa's shaft, and shall immediately commence to drive on the course of the lode; this level, west of Louisa's shaft, is also being cleared of stuff. Murchison's lode, in the new shaft, continues to yield occasional stones of rich copper ore; the indications of this lode are very encouraging, considering the very shallow depth. The pumping-engines are working very satisfactorily.

REDMOOR.—T. Taylor, Sept. 10: We have not taken down any lode in the 70 or the 80 ends during the past week. The lode in the 40 is larger, with good stones of tin, and letting out more water. We shall send away samples of tin to-day.

RHOSWYDOL AND BACHEIDON.—E. Davies, Sept. 9: The 15 west end continues to look well. The stopes in back of same level continue productive. The 15 east end does not look well. The stopes in back of the 10 are turning out some good ore. The 70 east improves a little in driving. The stope in back of the 70 west is without any change. The new driving on Nicholson's lode produces large blocks of lode, mixed up with some nice promising stones of lead ore.

RIBDEN.—R. Niness, Sept. 12: We have commenced to ease and divide Gilbert's shaft from the 62 to the 70, at which point we are cutting a plat for the convenience of driving the 70 west, to drain and to prove the ore ground going down in the bottom of the 62, which shall be accomplished as soon as possible, as I believe there is every probability that we shall meet with a rich course of ore in this level. I am glad to say that we sampled 11⅛ tons of copper ore of excellent quality on Saturday last.

ROSEWALL HILL AND RANSOM UNITED.—E. Thomas, Sept. 11: The lode in Ransom engine-shaft, below the 110, is much the same as when last reported. The lode in the end west of the Troan, in this level, has improved, now worth 25l. per fm. The lode in the end, east of shaft, is worth 4l. per fm. The stope in back of this level, west of the Troan, is worth from 20l. to 25l. per fm. The other parts of the mine are without any change.

ROSEWARNE CONSOLS.—James Berriman, Sept. 10: In the 20, south-east on the caunter, the lode is 1 ft. wide; we have not intersected the east and west lode as yet, but we have a good bunch of copper ore in the present end, and I believe improving in quality; in the back of this level there is a good bunch of copper ore. The winze behind this end is stopped, the water being very quick, and we shall not have so good a sampling as expected in consequence. In the 40, west of the engine-shaft, the lode is 1½ ft. wide, producing stones of ore; the 40 east is poor. We have cleared the 30 east under Ellen's shaft, but our setting-day being so near (next Saturday) we shall let the shaft remain till then. No change in any other part of the mine.

ROUND HILL.—Sept. 11: The lode in the 62 ends, driving north of engine-shaft, is still small and unproductive, but presenting indications of improvement. The stopes in the back of the 62, north and south of No. 2 winze, will yield 25 cwts. of lead ore per fathom. The stopes in the back of the same level, south of No. 1 winze, will produce 1 ton of ore per fm. The lode in a winze sinking below the 50, south of shaft, will yield 1 ton of ore per fm. The tribute pitches are looking well. We sampled a parcel of lead ore yesterday, computed 25 tons, for sale on Wednesday next, Sept. 18.

SCORRIER CONSOLS.—J. W. Crase, T. White, Sept. 11: The engine-shaft is sunk 28 fms. below surface; the ground is much improved, and the men are making rapid progress in sinking; with a continuation of the present easy ground we hope to reach the 30 fm. level in a fortnight from this time. We have resumed the sinking of the shaft on No. 2 lode, below the 18, by six men, at 6l. per fm.; from the appearance of the lode, and the tin raised in driving the above-mentioned level east of shaft, we have no doubt by sinking the same good tin ground will be laid open. We have six men clearing the adit with all possible dispatch, and hope to complete it before the winter rain sets in, as it will be of great benefit to the mine in discharging the surface water. The masons have nearly completed all the buildings, and the engine may be set to work whenever it is required.

SIGFORD CONSOLS.—Wm. Hosking, Sept. 11: In the north lode, in the adit end, driving east, the ground is somewhat improved for driving; no lode has been taken down for the last fortnight, but we shall do so shortly; the shaft sinking on this lode I expect will be communicated with this level by the end of the present month; the lode here is producing some good work for copper. In the engine-shaft the lode in end of the 24, driving west, is showing a great improvement, and yielding some good stones of copper, with other very favourable indications. I have to inform you that by costeaning the western part of the sett I have found the back of what I consider to be the north tin lode; I have not yet seen enough of it to report fully on its width or value, but from what I have already seen it shows a very favourable appearance. The great courses of ore we have discovered in Smith's Wood Mine are found to be falling directly towards this sett; they are already opened upon within a very few feet of the boundary hedge; this discovery is of great importance to Sigford.

SMITH'S WOOD.—W. Hosking, Sept. 11: The wheel is now erected and in working order; we are expecting the crown and pinion wheels for connecting the stamps from Tavistock daily; in the meantime the carpenters are busily engaged preparing the beams and other wood work for the buildings, and the wood-horses and frames for stamping. The masons are getting on fast with the smithery, carpenter's shop, and counting-house, a great part of the walls being already up. The men employed on the great north lode have for the last week been engaged in excavating the ground for the reception of the stamps, which is now completed. On the south tin lode we have cross-cut the lode in the end of the adit 12 feet in width, without as yet seeing the north wall; the lode still produces splendid work for tin throughout its whole width.

SORTRIDGE CONSOLS.—R. Jackson, Sept. 12: In the 74 east, on No. 2 south lode, the lode is small and unproductive. In the 62 west the lode is 2 feet wide, yielding a little ore. In the 50, driving south-west of Crew's cross-cut and west of the eastern cross-course, no lode has been met with. In Gribbon's rise, in the back of the 40, on the south part of the main lode, the lode is worth for length of rise, 9 feet, 45l. per fm. In the 40, driving east of Head's rise, on the south part of the main lode, the lode is worth 1 ton of ore per fathom. In the 40 east, on the north part of the main lode, the lode is 1 foot wide, yielding good stones of ore. In the 30 east, on the south part of the main lode, the lode is 2 feet wide—poor at present. In Blanchard's stopes, in the bottom of the 40, on No. 2 south lode, the lode is worth 1 ton of ore per fathom. In Rowe's stopes, in the back of the 40, on No. 2 south lode, the lode is worth 2 tons of ore per fathom. In Lawry's rise, in the back of the 30, on No. 2 south lode, no lode has been taken down. There is no change to notice in any other part of the mine.

SOUTH CARADON WHEAL HOOPER.—W. C. Cock, Sept. 7: The lode in the engine-shaft is about 18 in. wide, consisting of spar, mundic, and peach, also letting out more water, and looking more promising. The 62 west is also loooking a little better, containing a little ore the whole height of the end, but not enough to value; the ground is also something more favourable for progress. The 47 cross-cut and the winze are both taken, but there is no change in the appearance of either of these places.

SOUTH CARN BREA.—T. Glanville, Sept. 11: We have holed the new shaft to the 68. The mine is now well ventilated, and in good working order. We shall sell on Saturday next about 10 tons of tin.

SOUTH CONDURROW.—W. Richards, Sept. 10: In the 40 fm. level end, east from engine-shaft, the lode is 2 ft. wide, composed of spar, mundic, and impregnated with grey and yellow copper ore—a very kindly-looking lode, and promising to improve. In the 40, west from engine-shaft, the lode is 2 ft. wide, composed of spar, mundic, and malleable copper. In the 15, east from engine-shaft, the lode is 3 ft. wide, with quartz and mundic. In the adit end, west from engine-shaft, the lode is 2 ft. wide, with spar and flookan. In the adit end, west from cross-cut, the lode is 6 ft. wide, composed of peach and good stones of tin; I believe this tin lode to be the same which they have in Tolcarne. I should say, on the whole, we were never looking so well as at present.

SOUTH CRENVER.—E. Chegwin, Sept. 10: In the flat-rod shaft, sinking below the 105, the lode is 1½ ft. wide, producing stones of ore, but not to value. In the 105 east the lode is 2 ft. wide, producing ½ ton of ore per fm., and ground favourable for driving. Our tribute pitches are much improved in the past week.—South Mine: In the 51, east of cross-cut, the lode is 3 ft. wide, producing stones of ore and spots of tin. In the 51, west of cross-cut, on new south lode, the lode is 2½ ft. wide, producing good stones of tin, with a little copper ore.

SOUTH DOLCOATH AND CARNARTHEN CONSOLS.—Wm. Roberts, Sept. 11: Tutwork Setting: The 50 fm. level cross-cut to drive north by six men, at 12l. per fm. The adit east by four men, at 8l., and a stope in the back of the adit by four men, at 5l. per fm.; this stope is producing about ⅛ ton of rich grey ore per fm.

SOUTH WHEAL KITTY (Leiant).—S. Mitchell, jun, Sept. 9: Webb's engine-shaft is communicated with the adit level; we intend to cut a small plat at once, and then to resume sinking the shaft below adit as far as the water will allow us; the lode has greatly improved in appearance in the last 6 feet sinking, and the stratum is also very red; the ground in the bottom is harder than it has been, which is all the better for producing tin. We have commenced driving west of the shaft; the lode is very kindly and producing good work for tin.

ST. DAY UNITED.—F. Pryor, E. Ralph, Sept. 6: We have completed Billing's shaft—that is, cased and divided the same to the 114—and commenced to drive this week east of the same, driven more than 2 fms.; the lode is worth 70l. per fm. We shall commence to drive west next week; the value of which we shall report in our next. The stopes on the tin lode are much the same as for some time past. We have a promising lode in the 114, at Unity, on the copper lode, now driving for 3l. per fm., and producing good stones of ore, but we must look to our tin ground for the principal part of our returns, and should it continue to open out as it is now in sight, we shall soon have good reserves. We have had much more work to do than we anticipated in clearing out the foundation for the engine-house, and will take us almost another week to do, although we are working night and day; we are getting on very well with cutting down the shaft.

ST. IVES WHEAL ALLEN.—R. S. Bryant, Sept. 6: I was underground in this mine on Aug. 31, and beg to hand you the following remarks:—The underground operations are at present as follows:—Driving the 20 east, on Roderick's lode, which is from 4 to 6 in. wide, worth 3l. per fm. The 40 west, on engine lode, is unproductive. The 50 west, on engine lode, is at present driving north on a lode or carbona that has fallen in (or formed) between this and the 40; it is from 1 to 3 feet wide, was stoped by the former parties, and is at present in course of stoping; it has a very promising appearance, but the tinstuff now raising is of rather low quality. The 50 east, on the caunter, has been holed to one of the sinks below the 40; this has been stoped under the 50, said to be worth in places 20l. per fathom; these stopes were covered with water, so that I could not see them; the lode in the present end is small, and ground disordered; there are about 3 fms. more to drive to reach the next bottoms worked by the former parties. In the 30 east the tin ground has made a dip below the level, and they are at present bringing forth a stope in the bottom, which has nearly reached the tin ground, where the lode is worth from 15l. to 20l. per fm. Preparations are being made for sinking the shaft below the 50. The water in the mine is very little; a good 30-in. engine has been erected, and will be sufficient for the purpose of draining for several years; besides which there is also erected a 22-in. engine for drawing and stamping, that will be in readiness for stamping very shortly, after which returns of tin will be made. Although the ground opened by the present company so far has not been very productive, I see no reason to alter my opinion given in a report to you bearing date Jan. 16, in which it was stated that the lodes were bunchy and the ground hard for exploring, but this would be compensated for in the richness of the tinstuff, which can be prepared for the market with little expense; and judging from what has been done by the former and present companies, I still think that the mine when developed will prove lasting and remunerative.

— H. Taylor, Sept. 12: In Roderick's lode, at the 10, west of Louisa's shaft, we have cleared 30 fms.; this level was driven by the former workers, and the lode in the end of it is 12 in. wide, worth 6l. per fm.; we hope to say more about it next report. The lode at the 20, east of Louisa's shaft, is worth 3l. per fathom. The 50, west of Giesler's shaft, driving north on the carbona, is still disordered. The lode in the stopes south on the carbona is 20 in. wide, worth 4l. per fm. In the 40, west of shaft, the lode is 20 in. wide—tinny throughout. In the 50, east of shaft, the lode is still disordered. In the 30 east the lode is 12 in. wide, worth 5l. per fm. The lode in Giesler's shaft is improving. The steam-stamps will be put to work on Saturday next on some coarse stuff, to fill up the floors before we stamp the tinstuff.

TAMAR SILVER-LEAD.—T. Foot, Sept. 10: The engine-shaft is now sunk 3½ fms. under the 237. The bearers and cistern are put in, and we shall fix the standing-lift by the end of the present week. During the past week we have been driving by the side of the lode in the 237 south, consequently there is no change. We have set a stope in the back of this level, which will produce 5 cwts. of lead per fm. The lode in the 226 south is 12 in. wide, and will yield 5 cwts. of lead per fm., and likely to improve. The four stopes in the back of this level will produce as follows:—No. 1, 5 cwts.; No. 2, 8 cwts.; No. 3, 10 cwts.; and No. 4, 16 cwts. of lead per fm. We are driving on the side of the lode in the 215 south; when last taken down the lode yielded 15 cwts. of lead per fm. There are four stopes in the back of this level, which produce as follows:—No. 1, 10 cwts.; No. 2, 11 cwts.; No. 3, 9 cwts.; and No. 4, 12 cwts. of lead per fm. The two stopes in the back of the 205 will each produce 5 cwts. of lead per fm.

TEES SIDE.—R. Bray, Sept. 11: The drift driving east in the bottom of Providence engine-shaft, on the Sun vein, I am glad to say is continuing good, worth 25 cwts. of ore per fm. The ore is also setting down in the bottom very strong, even better than the roof, in kindly ground. I hope to see a good bunch of ore on the intersection of the two lodes when met with east.

TOLCARNE.—Sept. 11: Field's Lode: The lode at Field's shaft, sinking below the 30, is 3 ft. wide, yielding 3 tons of ore per fm. for the length of shaft (12 feet). In the 30 east the lode is 2 feet wide, composed of gossan, spar, and good stones of ore, a very promising lode. In the 30 west the lode is 18 in. wide, worth 1 ton of ore per fm. The lode in the 20 east is 15 inches wide, composed of gossan and spar, still letting out a quantity of water. In the 20 west the lode yields 1 ton of ore per fm. The lode in the winze sinking in the bottom of the 10 west is small and unproductive. In the 10 east the lode is 20 in. wide, composed of soft spar and gossan. The lode in the adit east yields 1 ton of ore per fm. The stope in back of the adit, west of cross-cut, on Enthoven's lode, is worth for tin 15l. per fm. The ground in King's shaft, sinking from the surface, is rather hard. The same will apply to the ground in the adit cross-cut, south from Field's shaft.

TREFULACK.—T. Hodge, Sept. 11: In the 44 cross-cut, north of engine-shaft, the ground is spare—nothing yet cut. In the 36 east, and east of the cross-course, we have cut the lode, and driven east on its course about 5 feet; the lode is in a disordered state, not yet out of the influence of the cross-course; however, the ground about the lode is of a very favourable character, and I think we are likely to have some improvement here soon. In the 36 cross-cut south the ground is getting easier and letting out more water; consequently, I think we are near the lode. In the 16 west, on the caunter, the lode is split into two parts; each is about 6 in. wide, composed of soft spar, gossan, prian, and mundic—a kindly lode. In Miner's pitch, in the bottom of the 36, east of wheel shaft, they have cut a good lode of tin, and if it continues the men will do well. The ground in this pitch is standing whole from this level to the 46.

TREVENEN AND TREMENHEERE.—J. Webb, Sept. 11: We have commenced sinking the engine-shaft below the 170, by eight men; the lode here is worth 25l. per fm. No. 1 stopes, east of shaft, are worth 18l. per fm. No. 2 stopes, east of No. 1, are worth 12l. per fm. No. 3 stopes, west of shaft, are worth 10l. per fm. We have commenced sinking a winze east of No. 2 stopes, where the lode is worth 18l. per fm. We find the old workers have gone deeper eastward, which we think is the best part of the run of tin; but we must sink the engine-shaft deeper in order to drain it. We have just now finished arranging the pump-work, both in Trevenen and Tremenheere shafts, which is in a good state for the winter. So far as we have seen the bottom of the workings, where the old people left off, we are well pleased with the prospects; but it will require some months to be able to operate on the lode the whole length, and what is likely to be the best part. There is nothing new to notice in the upper levels.

TREWEATHA.—Sept. 9: The cross-cut west at the 30 has been driven 4 fms. 4 ft. 6 in., and is now 6 fms. 2 ft. 6 in. from shaft; we expect there are a 3 fms. more to drive to cut the lode. The 15 south has been driven 3 fms. 3 ft.; the lode is 3 ft. wide, composed of quartz and gossan, with spots of lead occasionally—a promising lode. The stope in the back of the 15 south is at present worth 4 cwts. of lead per fm. We have now about 5 tons of lead ore dressed and undressed at surface. The water in the old mine has not sunk since last reported on.

TRUMPET UNITED.—G. R. Odgers, Sept. 7: The 25 east, to eight men, at 3l. 10s. per fathom; lode averaging 6 in. wide, and worth about 4l. 10s. per fm.; this we think will open out a piece of tinny ground. A winze to sink below the 15 east, to four men, at 4l. per fm.; lode 8 in. wide, and worth 4l. 10s. per fm. A stope in back of the 15 east, to two men, at 18s. per fm.; lode worth 40s. per fm. The 15 west, to four men, at 5l. 10s. per fm.; lode 6 in. wide, and worth 4l. per fm.; this is a kindly lode.—Flat-rod Lode: The 20 west, to six men, at 4l. per fm.; lode 1 ft. wide, of peach, quartz, &c., and yielding a little tin as we go west towards the cross-course; we are expecting an improvement. The landing at 3l. 10s. per month. The smiths' work and the screwing at 5l. 15s. per month. All the carpenters' work at 2l. per month.

VALE OF TOWY.—A. Waters, T. Harvey, Sept. 10: Clay's shaftmen are making fair progress in sinking below the 100; the lode in the bottom is very compact, composed of sulphate of barytes, clay-slate, and blende, but not so highly charged with the latter mineral as formerly. In the 100, south of the great cross-course, the lode is 4 ft. wide, a soft kindly-looking lode, yielding stones of blende and lead, but at present not to value. In the 90, south of Field's shaft, the lode is 2 feet wide, composed chiefly of barytes, but not to value for lead ore. In the 80, driving north of engine-shaft, the lode is from 4 to 5 feet wide, yielding barytes, carbonate of lime, with stones of lead ore. In Tank's winze the lode is 18 in. wide, unproductive. In the adit driving south of Nant shaft the lode is 4 feet wide, but not to value. No change in the tribute department since our last. The machinery and pitwork are in good condition. Our last sampling of ore, weighed off on Friday last, amounted to 59 tons 0 cwt. 1 qr., dry.

WEST BASSET.—W. Roberts, Sept. 11: The lode in the 65, west of Grenville's engine-shaft, is 3 ft. wide, producing 2 tons of ore per fm. All other ends, &c., continue much the same as last reported.

WEST BEAM.—Wm. Hosking, Sept. 11: We have cleared and well secured with timber the engine-shaft 32 fms. below the surface, and hope to reach the adit level in the 38 in the course of a fortnight. We have also erected a new horse-whim, repaired smithey, store-rooms, counting-house, and other buildings. Men are now engaged excavating ground for foundation of engine-house, and in opening out a quarry on the property, from which I expect we shall be able to raise the principal part of the stone for the engine and other buildings. A new 40-in. cylinder engine is now being made, which I expect will be delivered on the mine by the time we are in readiness for it. I am on the look-out for a water-wheel for drawing and stamping. We are pushing on the works in every quarter with the utmost expedition.

WEST CARADON.—F. Pryor, W. Johns, R. Trathen, J. Williams, Sept. 7: The 155, east of cross-course, on Downing's lode, we have suspended for the present, in order to put up a rise for ventilation, and also to prove the shoot of ore we have driven through in this level. In the 155 west, on Downing's lode, the lode is increasing in size, and we look forward to an early improvement, as we are approaching the ore ground mentioned in our former reports. The 116, on the new lode west, is at present disordered by a patch of elvan, but this, no doubt, will very soon disappear, when we may reasonably expect the lode to be of its former value. The 116 east, on the same lode, is producing fully ⅓ ton of ore per fm., with kindly appearances. The 104 west, on the same lode, is worth 1½ ton, or 18l. per fm. The stope in back of this level is worth 20l. per fm. The 92 west, on Allen's or main lode, is gradually improving, and is now worth fully 6l. per fm. The 80, west of cross-cut, on the new lode, which we set to drive at our last setting-day, is now worth 10l. per fathom. As we are getting near the ground opening up at the 104, we may reasonably expect that this level will open up good tribute ground. In the 38, on the north part of Menadue lode, we are glad to say the lode is considerably improved, and now worth from 15l. to 20l. per fm. The 27, east of Hallett's shaft, on the same lode, is disordered by a patch of elvan, but judging from the appearances of the lode in bottom of the end, we are of opinion that we shall shortly have a good lode of ore. The 27 west, on Menadue lode, is unproductive, but there is a little water issuing from the end, which is a good indication; the same remarks will apply to the 27 west. In the 17 west, on the same lode, we are in a beautiful channel of ground, and although the lode is small it presents precisely the same appearances as when we had our best courses of ore; we may, therefore, look forward to a favourable change in this level. In the 17 fm. level cross-cut, south of Hallett's shaft, we have in the last 6 ft. driving met with small strings of ore, and as there is water coming from the end it indicates we are not far distant from the lode. In the 17 west, on the north part of Glipin's lode, we have a leader of ore worth about 6l. per fm. In the adit level, west of Hallett's, on Menadue lode, we are in a soft channel of ground; this end will be pushed on with all speed, with a view of taking up the surface water, which is finding its way through Pryor's engine-shaft. We have completed the necessary alterations in the pitwork of Pryor's shaft, have fixed the plunger-lift, and done all other work in connection therewith, and have set the shaft to sink by nine men, at 15l. per fm. We have commenced to drive an adit level east of this shaft, to communicate with the level referred to above from Hallett's; the part of the lode we are now carrying is 2 ft. wide, and if indications go for anything it cannot fail to make ore in depth. We have to-day set our usual number of pitches and tutwork bargains, and, upon the whole, we consider that our prospects have improved since our last pay-day. We have sampled 234 tons of our usual quality copper ore, for sale on Sept. 19.

WEST DEVON CONSOLS.—G. Rowe, Sept. 12: The lode in the 40, east from engine-shaft, has improved has improved in size, and shows indications of becoming still larger as we get nearer the shoot of ore ground, which we anticipate being some few fathoms ahead. The ground is not quite so favourable for progress as we expected to find it; nevertheless, its character and appearance it in every way congenial for the production of copper ore. There is no change in the tribute department to notice since last reported on.

WEST POLMEAR.—W. Body, Sept. 12: The 20 cross-cut is driven south of the engine-shaft about 44 fathoms. The ground is composed of floors of spar, with light blue killas; driving at 85s. per fathom. We expect soon to intersect the first lode, as the water is very strong in the end. The 20 is driven west of the engine-shaft, on the north part of the lode, about 24 fathoms. The lode here is about 1½ ft. wide, composed of spar and peach; driving at 55s. per fathom. The 20 east is driven about 23 fms., the lode being composed of spar and peach, with occasional spots of ore, and is about 3 feet wide; driving at 30s. per fathom.

WEST SHARP TOR.—William Richards, Sept. 9: The new gudgeon for the bob was brought on the mine on Saturday afternoon, which, with the repairs to the bob, was put right by 12 o'clock yesterday, by which time we had finished the alteration in the pitwork—removing the defective H-piece and putting in a new one in its place; taking out 12-inch plunger pole and case, and putting a new 14-inch pole and case in its place, and I am glad to say the whole of this alteration has been performed without accident to any of us. The water had risen to the 60, but I am glad to say the new work answers well, and the water this morning (six a.m.) was down 2 feet below the back of the 70. I hope we shall have nothing to impede the forking. I am most anxious to see the lode in the 162 fm. level.

WEST SOUTH CARADON.—F. Pryor, J. Williams, Sept. 7: We are now enabled to resume the sinking of Pages's shaft, which is down 19 fms. from surface, and we hope against our next setting-day to communicate the same with the adit level. We found by our dialling that the former workers were not driving on the main part of the cross-course, and that the distance we had to reach it was about 9 fms. We have now cut through the same, and find it fully 8 ft. wide. Having completed this object we are now enabled to put up the rise against Page's shaft, as referred to above. We may mention that as soon as this communication is effected we shall at once commence to cross-cut north on the cross-course, to intersect the other well-known lodes in this sett. We are still of the same opinion as we often expressed in reference to the ultimate results.

WEST WENDRON CONSOLS.—R. Kendall, Sept. 7: The engine-shaft is 9 fms. below the adit; the lode is yielding more water, and a little larger, but no tin to value; sinking at 16l. per fm. The flat-rod shaft is 7 fms. below the adit; sinking by nine men, at 13l. per fm.; I expect this month will nearly bring us down on the lode. The north adit is driving by three men and one boy, at 30s. per fm. The adit from the south part of the sett is driving by three men and one boy, at 5l. 10s. per fm.; this level is coming near the lode on the old workings. The adit behind the smiths' shop is driving by four men, at 3l. per fm.; in this level we have cut a branch, but no tin to value. We are expecting every day to hole to the old men's workings.

WEST WHEAL MARGARET.—W. White, Sept. 10: The lode in Hallett's shaft is a little improved, it is now 18 in. wide.

WEST WHEAL TREVELYAN.—J. D. Osborn, Sept. 7: The shaftmen have completed cutting plat at the 58, and next week, all being well, they will put in penthouse and resume sinking the engine-shaft. In the 58, driving west, we are cutting through the lode, which is, so far as we have seen, composed of quartz, &c. In the 48, driving west, the lode is 2 ft. wide, worth for ore 6l. per fm. The stopes in back of said level are worth 8l. per fm. There is no alterations in the two cross-cuts, north and south.

WHEAL AGAR.—W. Roberts, Sept. 11: In the 80, driving east, no lode has been taken down since last reported. In the 80 west the lode is at present small and unproductive. In the winze sinking under the 80 the lode is 1½ ft. wide, promising, with stones of good ore. The lode in the 70 west is 3 feet wide, producing stones of ore; in the same level east the lode is 2 ft. wide, with stones of ore. The stope in the back of the 80 continues to produce 4 tons of ore per fm.

WHEAL ANNE.—H. B. Grose, Sept. 10: Saturday last being our monthly setting, the following are the particulars of the work set:—The shallow adit to drive on Allen's lode by four men, 8 fms. stent or the month, at 55s. per fathom; the lode is 5 ft. wide—good stamps' work. The deep adit to be driven on the same lode, at 65s. per solid fathom; the lode is from 12 to 14 ft. wide, saving work. The stopes in back of the shallow adit by four men, at 16s. per fm., and a stope on the north lode by two men, at 10s. per fm.; the lode is producing fair quality work. The adit to drive on the Nine Stones lode by four men 20 fms. stent, at 12s. per fm.; the lode is from 2 to 3 ft. wide, producing fine stones of tin, with every prospect of a continuance. We have also set the work to to spall at the floors, and to put to the stamps, at 6s. per 100 sacks; and all the framing in the deep adit at 5l. for the month. By the prices here given the mine will work cheap, there being no steam or horse-power wanted, which will be a great saving in the monthly cost. Our stamps are working very well indeed, and the works turning out quite equal to my expectations; and I have not the least doubt of having sufficient tin this month to pay cost, and leave us good profits.

— Sept. 11: I have just come back from the Nine Stones part of the sett, where we are breaking some splendid stones of tin, and I will send you a box of the same.

WHEAL ARTHUR.—T. Carpenter, Sept. 10: There is no alteration in Burley's or Palmer's stopes since last week's report. I hope we shall make the communication in the course of a week or ten days from this time, as the ground is favourable for exploring.

WHEAL CONCORD.—H. Luke, Sept. 12: We are now driving the cross-cut south of the 38 with six men, and the 10 east with two men and two boys; the lode is large and kindly, with good stones of lead and a strong appearance of plenty at a deeper level.

WHEAL CREBOR.—Capt. Gifford, Sept. 12: In the 60 east we shall take down the lode to-night, and if any great improvement will write you by to-morrow's post. We have communicated the rise in the back of the 60, east of Cock's shaft, with the winze in the bottom of the 48 to-day, and shall at once commence to desue the lode both east and west of the same. In the 48 west we are making good progress with driving, and a little more water is coming from the end.

WHEAL CUPID.—R. Pryor, sen., Sept. 6: Setting Report: The 54 to drive east of the engine-shaft by six men, at 4l. per fm.; the lode is of much the same character as when last reported on. The 40 to drive east of this shaft by six men, at 4l. per fathom, where the lode is 2 ft. wide, and worth about 4l. per fm. This end is in advance of the 54 about 2 fms., and has of late undergone a most favourable change. In the back of this level there are four men working on tribute at 11s. in 1l., and also two men in the back of the 54 at the same tribute.

WHEAL EDWARD.—M. H. East, Sept. 7: South Lode: In the 81 fm. level west we have finished taking down the lode in the end; it is 4 ft. wide, and worth fully 3 tons of ore per fm., and looks exceedingly promising. In the rise in back of the 71 west the lode is worth 4½ tons of ore per fm., and the same remark will apply to the winze below the 61 west. In the 50 west the lode is worth 1 ton of ore per fm. In the 40 east we have taken down the lode, which proves to be worth 2 tons of ore per fm. The lode in the stope below this level is worth 3 tons of ore per fm. There is no change in any other part of the mine worthy of notice.

WHEAL GRENVILLE.—G. R. Odgers, W. Bennetts, Sept. 7: During the past week the sumpmen have finished putting in the skip-road from the 100 to the 110, and they are now engaged cutting in south towards the south part, but as yet we see no change. The lode in the 90 west is 3 in. wide, producing good stones of yellow ore, embedded in mundic and peach, and letting out a quantity of water. The ground in the 80 cross-cut north is of much the same character. The pitches are looking much the same.

— G. R. Odgers, Sept. 12: At the flat-rod shaft we have cut through the lode, which is from 18 to 20 in. wide, composed of quartz, gossan, &c., with a little tin and spots of mundic; altogether for the depth, 16 fms., we think it to be a kindly lode, and looking much better than it did at East Grenville at the same depth.

WHEAL GRYLLS.—E. Rogers, J. Pope, Sept. 12: Fisher's Lode: In the 20, east of Annie's engine-shaft, the lode is worth 7l. per fathom; driving at 4l. per fathom. In this level west the lode is worth 3l. per fathom; driving at 20s. per fathom. In the same level, east of the flat-rod shaft, the lode is small and poor; price for driving 25s. per fathom. West of this shaft is also driving at 25s. per fm.; the lode is worth 20l. per fathom. The winze in the bottom of the 10 is down to water, but we hope to be able to sink it again in a few days. The two ends east of Grylls's shaft, in the 10, is near the boundary, therefore suspended.—Georgia Lode: In the adit level, driving south of the shaft, the lode is worth 20l. per fathom; driving at 6l. per fathome In the end north the lode is worth 30l. per fathom: driving at 2l. 10s. per fathom. In the stope in the back of this level the lode is worth 40l. per fathom; stoping at 5l. per fathom. The stope in the back of the 33 is worth 14l. per fathom; stoping at 6l. per fathom. In our tribute department we have four men working at 4s. in 1l., six men at 5s., two men at 6s., two men at 6s. 8d., twelve men at 8s., eight men at 10s., two men at 12s., and two men at 13s. 4d. in 1l., the tributors paying all expenses. We sampled on Friday, the 6th inst., 1987 barrows of tinstuff, which we estimate to be worth 820l., and is for sale at the office to-morrow morning at 10 o'clock. We are accumulating a large quantity of the coarse work for the stamps, and expect to commence building the engine-house in a few days, and shall get it working as soon we possibly can.

WHEAL HARRIETT.—S. Williams, Sept. 7: The lode in the 115, east end, is changing in appearance, and producing more iron and mundic; lode 1½ ft. wide. I am thinking we shall very soon have tin in this end. The lode in the 100, east end, is 2 ft. wide, producing 4 cwts. of tin per fathom. The lode in the stopes above the 100 is worth for tin and copper ore 15l. per fm. The lode in the stopes below the 10 is worth for copper ore 12l. per fm. The deep adit end is unproductive. There is nothing in the 115 or the deep adit cross-cuts to report on. The tribute pitches are without change to notice.

WHEAL HARRIS.—John Pryor, Sept. 12: The branch cut in the end last week is at present disordered by a flookan which intersects it, but appears to be again improving as it gets off the influences of it. The ground is getting more interspersed with smaller branches, and a further increase

place to have a good mine, and that it will ultimately become, with a proper development, one of the best mines in all the district.

WHEAL PROSPIDNICK.—R. Kendall, R. Sincock, Sept. 7: The lode in the 22, east and west of Watson's shaft, is 8 in. wide; no tin to value. The lode in the 12, east of Watson's shaft, is 8 in. wide, worth 5*l.* per fm., and still improving. The lode in the winze sinking under the 12, east of Watson's, is worth 20*l.* per fm. The lode in the 12, west of Watson's, is much the same; no tin to value.

WHEAL SICILY.—J. Symons, Sept. 11: The 17 is driven north of whim-shaft about 6 fms.; lode small at present. The 17, south of whim-shaft, is driven about 3 fms.; lode 7 in. wide, composed of soft spar, prian, and lead—a very kindly lode. In the cross-cut, west of engine-shaft, we have not yet met with the lode, although we often meet with breast-heads, which are coated with carbonate of iron, more so than for some time past; I think this a good indication that we are getting near the lode. By calculation from the point of the horse where the two lodes meet, I think we have about 4 fms. more to drive the cross-cut to reach the lode.

WHEAL TRELAWNY.—F. Pryor, R. Pryor, P. Grenfell, Sept. 2: North Mine: The sump-shaft is down 7 fms. below the 172, and sinking by 12 men, certain bargain. We have opened 5 fms. on the capels of the lode at the 172, and shall now cut through it; after this is done we will report its value. The 160 north is worth 6*l.* per fm. The 160 south is in the slide. The 150 south is improved, worth 16*l.* per fm. The winze sinking below this level, 15 fms. from the end, worth full 20*l.* per fm. The 150 north is producing saving work; we have holed three winzes, which have opened up good ground; we have also commenced to sink Chippendale's shaft below the 150. Our pitches in this mine are much the same.—South Mine: We are driving by the side of the lode at the 150. The 140 is worth 15*l.* per fathom. Other places much the same on the whole. We are opening up some pretty good ground, and when it is fairly cut up will be proved as to the value by our sampling; sampled and sold 80 tons of crop lead, price 22*l.* 11s. 6d.

WHEAL TREMAYNE.—R. Williams, J. Williams, Sept. 7: At the boundary engine-shaft, in the 133 east, on Allen's branch, the branch is yielding a little low price tin-stuff, with an improving appearance. In the 123, east of Allen's shaft, on Allen's branch, the branch is worth 12*l.* per fm. In the 113, east of the same shaft, on Allen's branch, the branch is worth 6*l.* per fm.; the stopes in bottom of the same level are worth on an average 14*l.* per fathom; the stopes in back of the same level are worth on an average 13*l.* per fm.; in the cross-cut south of the same level, towards the engine lode, there is no change to notice since last report. In the 103, east of the same shaft, on Allen's branch, the branch is worth 12*l.* per fm. The skip-road at the new engine-shaft is completed to the 53, and the men are proceeding with the same below as fast as possible.

WHEAL UNION.—T. Glanville, Sept. 11: In the flat-rod shaft the lode is 3 ft. wide, composed of spar, mundic, tin, and copper ores. In the 40 east the lode is 3 ft. wide, producing good stones of copper ore. In the eastern shaft, sinking below the 18, the lode is 2 ft. wide, producing stones of copper ore.

YARNER.—R. Barkell, Sept. 11: South Lode: The 30 west is improved since last report, now worth 20*l.* per fm. Thomas's stope will yield 4 tons per fm. The stope east of winze we are obliged to suspend until the stuff is clear; the lode in this stope will produce 4 tons per fm. We have had some good stones of ore from the 20 west during the week, but not enough to value. The 30 east, on north lode, is letting out more water.

REMOVING DISTANCE-MARKS IN MINES.—A case of considerable importance to the mining community was tried at the Liskeard County Court on Tuesday, four working miners, who had been discharged from Wheal Mary Ann upon suspicion of having been concerned in the removal of a distance-mark from which their work was calculated, bringing an action against one of the adventurers in the mine for the amount which they had earned previously to the mark being removed, and which, in accordance with a rule of the mine, had been withheld. In March the plaintiffs entered a suit in equity in the Stannaries, which was dismissed with option to bring an action at common law. The plaintiffs, Jonah Trevarthen, Richard Hosking, Bate, and James Crossman, were severely examined and cross-examined, but nothing was elicited to prove by whom the mark had been removed. Mr. Stokes appeared for the adventurers, and Mr. Whitehurst, of London, for the miners. Mr. Whitehurst, in addressing the Court for the defendants, spoke of the importance of the case to the men in several ways—firstly, with regard to the loss which would be sustained by them if the verdict was adverse; and, secondly, the loss of character which would necessarily follow by being discharged from such a mine as Wheal Mary Ann, with a manager of the standing in the county as Mr. Clymo. He contended that the acts of the agents had been most arbitrary, for they had taken upon themselves to say who, out of six men, were guilty, and who were innocent. This was exemplified by their taking two of the men and paying them their share of the wages earned, and retaining the wages of the other four. The whole course was reviewed most ably by the advocate, and he concluded by urging upon the Court to give a verdict for his clients, who would thereby be placed in a right position with the mining interests of the county. The judge reserved his decision until the next Court.

NORTH WHEAL JANE.—The arbitration between Messrs. Wasley and Webb has been concluded in favour of the petitioner, Mr. Wasley. It appeared from the evidence of the petitioner that he was a tin-dresser in North Jane Mine, and in Jan. last consented to take a six months' contract to dress all the tin ore raised in the mine, at the rate of 5s. 6d. in 1*l.*; and that before the six months had expired he was applied to by the then agent of the company to rescind the contract, and that for so doing the company would allow him 25*l.* 4s. as a recompense. This application, it appeared, was made to him on the ground that the tin ore had greatly improved in value, and that the tribute was too high. The petitioner consented to withdraw from the contract on his receiving the above-named sum. For the defence this arrangement was entirely denied; but after the case had been most carefully gone into, and the arbitrators had satisfied themselves with regard to every minute detail touching the point in dispute, a unanimous decision was given in favour of the petitioner for the full amount he sought to recover, with all costs attending the hearing of the petition, as well as those of the reference. Mr. J. P. Bennetts, Falmouth; Capt. Jos. Vivian, of North Roskear; and Capt. Richards, of Consols, were the arbiters.

ZENNER'S ROTATING FRAME.—In our notice of the quarterly meeting of the adventurers in Wheal Margaret, last week, we extracted a passage from the agents' report, which spoke most favourably of Zenner's rotating machines for dressing tin, lead, and copper ores; and we now learn that the machine is in general use in the mines on the Continent, and leading lead mines in the North of England, and that they are being rapidly adopted in the Australian and South American mines. As the charges for licenses to use the machine are comparatively trifling, and the saving in labour and in waste of ore is stated to be very great, they will doubtless soon be extensively patronised in Cornwall.

GAS ENGINES FOR STEAM-BOATS.—M. Lenoir has propelled up and down the Seine, at Paris, a small iron screw-boat by means of his engine, in which the motive-power is compressed gas. On Aug. 20 he took on board six gentlemen, all that his boat could carry, at the Bridge des Invalides, and descended to the Bridge de l'Alma, and returned again to the Bridge de la Concorde. His little vessel was entirely without oars, sails, chimney, fire, or any other sign of a motive-power. This experiment is said to be only a prelude to one upon a larger scale, which will shortly be made by an American inventor, named M. Chandor, who proposes to navigate a pleasure yacht, fifteen metres in length and two and a half metres broad, by means of his gas-engine from the Louvre down the Seine, through the North and Baltic Seas, and to land at St. Petersburg.

JOINT-STOCK ENTERPRISE AND THE COAL TRADE.—An influential company, with a capital of 40,000*l.*, in 5*l.* shares, has just been formed for working some valuable seams of coal near Chesterfield. The coal is of the well-known Silkstone kind, and it is remarked that the existence of the coal, and the cheap rate at which it can be obtained, as proved by borings and shafts already sunk both in and around the field, entirely remove from this undertaking anything like risk or speculation, and thus afford an opportunity seldom met with for moderate capitalists to invest in one of the most profitable and important productions in the kingdom. Much of the capital has already been subscribed, and the works will be forthwith commenced. No payment, either in shares or money, will be given to the projectors for promoting the company. Messrs. Brown and Jeffcock, of Sheffield and Barnsley, have carefully inspected and favourably reported on the property, and Thomas Harrison has furnished a tabulated estimate, which shows that 66 per cent. may be realised upon an outlay of 16,000*l.*

The railway from St. Ghislain to Ghent, in Belguim, which has been constructed by the Hainault and Flandres Company, was opened a few days back. It passes through the richest coal field in the country.

CARMARTHEN UNITED MINE.—In a letter lately received from Captain Sanders, he says—"I am happy to say that the 42 is looking splendid; I have never seen such a beautiful looking lode in the mine before. I have sent you, by rail, a box containing some specimens of ore from the lode, and I do not think better can be found in the kingdom. The most solid cubes of ore came from the foot part of the lode, and the hollow ones from the hanging part." The specimens alluded to in the above extract have arrived, and have been examined by Mr. Evan Hopkins, who, while he endorses all the captains says about their beauty as specimens of ore, considers them as more valuable in a mining point of view, as indicating the great strength of the lode, and richness of ground in depth for lead, as both he and Capt. Sanders believe them to be from the top of a great mass of ore. The specimens may be seen at the company's offices, No. 30, Great Winchester-street, where it will afford the secretary pleasure to show them to any gentlemen who may favour him with a call between the hours of 12 and 3.

CENTRAL SNAILBEACH MINE.—Capt. James Richards, of West Snailbeach, having contradicted the assertion of Mr. E. Davies, respecting the underlie of the lode, the following statement has been made:—"Our reply to Capt. James Richards's letter, impugning Mr. E. Davies's letter, is what we and Mr. E. Davies have written—and the same will bear the strictest investigation. We repeat that the underlie of the main lode of this mine to a greater depth than 150 yards in its western workings is towards the north, and that the 'Strong Vein' in the Crow's Nest level of the Central Snailbeach sett is none other than the main lode of this mine.—JOHN EVANS, DAVID DAVIES, two of the present managers of the Snailbeach Mine: *Snailbeach Mine, Sept* 10."

LOCHWINNOCH CONSOLS.—These mines have this week been inspected by a Cornish mine agent from Redruth, by order of one of the principal shareholders. He expresses his surprise at the immense quantity of ore in the mine as reserves, and discoveries which will enable the present sampings, of about 100 tons per month, to be continued for a period of many months to come, and when the ore can be brought to the floors by means of a shaft, which is daily expected to be holed, great cost will be saved, the ventilation improved, and the returns augmented by 50 tons per month, or even more, without inconvenience. A deep level is now rapidly approaching the lodes, by which the present workings will be unwatered, and the mine deepened by about 10 fms. One of the north and south lodes, or slides, lets out a large stream of water, at present combatted by hard pumping; this will, of course, be obviated, and then the mine will be as cheaply wrought as any mine in Great Britain, the lodes being very flat, or nearly horizontal in some instances. Vast returns may be made without the aid of machinery of any kind, the ore being roughly spalled and sent to Swansea for crushing for the coarse lot, only the prills and second quality are dressed on the mine. It will be seen that the mine now regularly samples at every fortnightly Swansea ticketing, an almost unparalleled instance for so young a mine, only nine months having elapsed since the first sod was cut; the ores hitherto sold have been surface ores, and what was saved in sinking and driving, consequently of low percentage. The future ticketings will speak for themselves, and the fortunate adventurers may confidently look forward to their mine soon appearing in the much-envied List, and their shares, 256 only, being of very great value, at present in few hands, not more than 20 shareholders.

AUDLEY MINES, CORK.—I, JAMES LAWRENCE, MINER, from Cornwall, having worked in these mines during the whole time they have been in operation, am in a POSITION TO GIVE EVERY PARTICULAR RELATING to their APPEARANCE and PROSPECTS. I was employed there at the time when Capt. Wm. Martin was discharged, and as he has given an adverse report upon the property I will readily give the precise details of the workings, which will at once refute that opinion. The old Cappagh Mine is well worth a trial, as I can prove that there is 8 in. of solid ore in the 82 fm. level, and more than that in several parts of the mine; this I am ready to prove to any gentleman or company that may require it. —Address, JAMES LAWRENCE, miner, Porkellis, Wendron, near Helston, Cornwall.

The Mining Market; Prices of Metals, Ores, &c.

METAL MARKET—LONDON, September 13, 1861.

	£	s.	d.	
COPPER.				
Best selected....p. ton	101	0	0–	—
Tough cake..... „	98	0	0–	—
Tile ..... „	98	0	0–	—
Burra Burra .... „	100	0	0–	—
Copiapo ..... „	96	0	0–	—
Copper wire .....p. lb.	0	1	0½–	—
ditto tubes ..... „	0	1	1 –	—
Sheathing & bolts .. „	0	0	11 –	—
Bottoms ..... „	0	1	0 –	—
Old (Exchange) .... „	0	0	9¼–	—
IRON.	Per Ton.			
Bars, Welsh, in London..	6	5	0–	—
Ditto, to arrive	6	0	0–	—
Nail rods	7	0	0–	—
„ Stafford. in London	7	0	0–	—
Bars ditto	7	10	0–	8 0 0
Hoops ditto	8	10	0–	—
Sheets, single	9	0	0–	9 10 0
Pig, No. 1, in Wales ..	3	0	0–	4 0 0
Refined metal, ditto....	4	0	0–	5 0 0
Bars, common, ditto....	5	0	0–	—
Ditto, merchant, in Tees	6	10	0–	—
Ditto, railway, in Wales	5	0	0–	5 2 6
Ditto, Swed. in London.	10	5	0–11	0 0
To arrive	10	10	0–	—
Pig, No. 1, in Clyde....	2	8	0–	2 10 0
Ditto, f. o. b. in Tees ..		—		— —
Ditto, forge, f. o. b. in Tees		—		— —
Staffordshire Forge Pig.	3	10	0–	3 12 6
Welsh Forge Pig		—		— —
LEAD.				
English Pig	19	5	0–21	10 0
Ditto sheet	20	5	0–20	10 0
Ditto red lead	22	0	0–	—
Ditto white	28	10	0–30	0 0
Ditto patent shot	22	10	0–23	0 0
Spanish	18	10	0–	—

* At the works, 1s. to 1s. 6d. per box less.

BRASS.	Per. lb.	
Sheets	8¾d.–	9¼d.
Wire	9¼d.–	—
Tubes	10¼d.–	10½d.
FOREIGN STEEL.	Per Ton.	
Swedish, in kegs (rolled)	—	— —
„ (hammered).	14 10	0–15 0 0
Ditto, in faggots	15 10	0– —
English, Spring	18	0 0–23 0 0
Bessemer's, Engineers Teel	44	0 0– —
„ Spindle	30	0 0– —
QUICKSILVER	7	0 0 p. bottle
SPELTER.	Per Ton.	
Foreign	18	5 0– —
To arrive	18	10 0–18 12 6
ZINC.		
In sheets	24	0 0– —
TIN.		
English, blocks 120	0	0– —
Ditto, Bars (in barrels)..121	0	0– —
Ditto, Refined 122	0	0– —
Banca 118	0	0–
Straits 117	0	0– —
TIN-PLATES.*		
IC Charcoal, 1st qua. p. box.	1	8 0– 1 9 0
IX Ditto 1st quality „	1	14 0– 1 15 0
IC Ditto 2d quality „	1	4 6– 1 6 6
IX Ditto 2d quality „	1	11 0– 1 13 0
IC Coke ..... „	1	1 6– 1 2 6
IX Ditto..... „	1	7 6– 1 9 0
Canada plates ....p. ton	12	10 0–13 0 0

In London; 20s. less at the works.

Yellow Metal Sheathing . p. lb. 9d.–9¼d.

Indian Charcoal Pigs in London ..... } 6 12 6– 6 15 0

REMARKS.—The large speculative business which has of late been doing in the metal market appears now to have given way to a more regular and steady trade, which though showing less activity is established on a more permanent basis. It is encouraging to observe that, notwithstanding the deplorable falling off in American exports, there is still plenty of life remaining in our shipping trade. The improved reports from some of the Indian ports, and the increasing demand for France, all tend to raise the tone of the market, and while money continues plentiful, and the rate of discount low, we may reasonably expect a steady augmentation of our commerce.

COPPER.—No further change in fixed rates has yet taken place, and the market for English descriptions continues steady; smelters are generally well supplied with orders for sheets and sheathing, as well as unmanufactured. According to the rates paid by the smelters for their ores the present price of copper is low, and any increase in the demand would, doubtless, be followed by an advance in price. The market for foreign is firm, and holders, for the most part, are disinclined to accept present rates; a fair enquiry exists, but as the stocks are mostly in strong hands there are but few transactions to report. Burra Burra, 100*l.*; Kapunda, 100*l.*, paid during the week; Copiapo, 96*l.*; Baltimore, 93*l.*; Chilli slab, in Liverpool, 90*l.* Yellow metal rather less enquired for; sellers are unable to realise full prices, and sales are made at 8¾d. to 9d.

IRON.—Orders for railway iron are still very scarce, and as this is by far the most important branch of the trade, great depression hangs over the market generally. Manufacturers are obliged to take contracts for merchant bars in order to keep their works going, but the price at which these orders are given out—5*l.* 2s. 6d. to 5*l.* 5s. in Wales, or 6*l.* f.o.b. in London—are entirely unremunerative; it is, however, fortunate that a pretty good demand exists for this description of iron, or makers would either have to accumulate immense stocks or blow out their furnaces: the former course is only open to large capitalists, and the latter would throw thousands of men out of employ, and doubtless ruin many masters. The Staffordshire manufacturers are also very short of work, the loss of American orders particularly affecting them. There has been lately a slight increase in the number of shipping orders, but these when divided amongst the numerous makers are quite insufficient to give even an appearance of activity to the market. Swedish bars are exceedingly difficult to place, though the price is much lower now than for several years past, chiefly in consequence of the absence of any American demand, it is difficult to find cash buyers even at 10*l.* Scotch pigs are quieter, and the market exhibits less firmness; mixed numbers quoted 51s. 3d. on 'Change to-day.

LEAD.—A trifling demand only exists for English pig, which is now to be bought at 19*l.* to 19*l.* 5s. for ordinary soft quality, and 21*l.* 5s. for best brands. Sheet and shot unaltered. Spanish pig, 18*l.* 10s.

SPELTER.—There is a considerable lull in the activity caused by the rapid advance of this metal, and buyers are now less eager to operate; sales have been made during the week at 18*l.* 5s., which is 5s. per ton lower than last week's quotation. It would not be at all surprising should the market further decline when arrivals take place, as the purchases lately made are mostly speculative, and likely to be thrown on the market again at any time. ZINC remains firm at 24*l.*, and in fair request.

TIN.—On the 10th inst. smelters of English announced an advance of 3*l.* per ton, making present price of block and ingots 120*l.*; bars, 121*l.*; and refined, 122*l.* At these prices there is an ordinary amount of business doing, though the demand is considerably less then before the rise, when in comparison with the cost of foreign the price was low. In foreign the market has been rather easier the last day or two. Straits is less firmly held; sales reported at 117*l.* for cash. Banca is much neglected, present price being but 1*l.* above Straits (the usual difference is 3*l.* to 5*l.*); it is to be bought freely at 118*l.*

TIN-PLATES.—There is a slightly improved enquiry, and quotations remain unaltered.

STEEL.—English descriptions but little in request, and makers are badly off for orders. Swedish keg has been in better demand lately, and several sales have been made; now qnoted 14*l.* 10s. to 15*l.*, hammered quality.

GLASGOW, SEPT. 11.—There has been again an extensive business done in pig-iron; 51s. 6d. one month, and 51s. 4d. to 51s. 3d. cash, were the prices paid. The close was quiet—51s. 3d. eight days obtainable; while a little iron might have been had at the price for prompt payment. G.m.b., No. 1, 50s. 9d.; No. 3, 49s. 9d.

LIVERPOOL, SEPT. 13.—Considerable improvement has been seen in our metal market during the past fortnight. Staffordshire iron is firmer in price, with a little better demand. Welsh bars are very steady, and no good stamps can be had under 5*l.* 2s. 6d. to 5*l.* 5s., f.o.b. at the shipping ports. Scotch pigs are firm, at No. 1, g.m.b., 51s. to 51s. 6d., f.o.b. in Glasgow, and will probably maintain their position. If the Monkland furnaces are put out, as is expected, some advance will likely take place. Copper is not to be obtained at less than the quoted price, although the demand is rather limited: ores have risen in value considerably of late. Block tin was advanced 3*l.* per ton on August 27, and 3*l.* per ton on the 10th inst.; making the present price 120*l.* Tin-plates are much better, especially coke, which has rallied from 20s. 3d., IC. (the lowest point), to 21s. per box, free on board here. Lead is unchanged. Spelter very stiff at quoted prices.

NEW YORK.—Messrs. Winterhoff and Co., under date Aug. 27, write—Up to a week ago business remained very quiet, but since the negociation of the U. S. loan there has been an improved feeling, and this is likely to continue, as the vast requirements of the Government for the army and navy will give an impetus to many branches of the manufacturing interest.—Tin: Although the new tariff does not impose any duty on this article, importers have withheld their stocks from the market, and the sales have been altogether from second hands for consumption. They amount in all to 2000 slabs Straits, at 24½c. and 25c., and 600 to 700 Banca, at 27c. cash. Straits is quoted to-day 25½c., and Banca 27c. We have had no arrivals whatever, and we know of no invoices on the way. We estimate the stocks at 5800 Banca (1600 from China), and 35,400 Straits—in all, at Boston and New York, 41,200 slabs. The fluctuations of the European markets produce no effect here. With a more than ample supply for some time to come, and prices still below the cost of importation, there is little encouragement for fresh shipments. The consumption is from hand to mouth only, but it has seen its lowest point. Our stocks show a small decrease from last month, and if holders remain as firm as they have been for the last two months, to-day's quotations will probably be fully maintained.—Spelter: We have nothing to report. The stocks of foreign remain untouched, and the quotation nominal at 4c. to 4½c. The duty is unchanged, 1c. per lb.—Copper was dull at 17⅝c. to 17¾c., when, a few days ago, a sudden change took place. The more favourable accounts from England and France brought out renewed orders for shipment and speculation, and 700,000 to 800,000 lbs. Lake were sold at 17¾c. to 18c. As even this price is very low in comparison with former years, and the different companies have disposed of the greater portion of their receipts, they avail themselves of the better prospect, and ask advanced rates. The Minesota Company have withdrawn their copper from the market: we quote 18½c. for Lake. The stocks on hand are not large, but the yield of the mines is as promising as ever. It is difficult to furnish any precise data; however, in round numbers, the produce of 1860 is estimated at 13,500,000 lbs. ingot, of which 2,000,000 will be consumed in the West, and of the remaining 11,500,000 lbs., more than half has come east already, and we suppose the stock in first and second hands is about 2,000,000 lbs. The eastern smelters work under very great disadvantages; the supply of native ores from the South is cut off, and foreign ores pay a duty, while the increased supply from the Lake creates additional competition. They are producing but little copper, and have maintained their price at 18c., delivered at Baltimore. The domestic manufacturers are better employed than of late, but they operate very cautiously. The shipments for the last four weeks are much smaller than for some months past—From New York to Havre, 229,000 lbs.; New York to Hamburg, 284,000 lbs.; New York to Rotterdam, 43,000 lbs.=556,000 lbs. From Baltimore to Bremen, 50,000 lbs.—Lead has advanced materially, partly under the influence of purchases for the Government. We quote galena, $5·50; Missouri, $5·35; Spanish and German, $5·40 to $5·50. The new tariff imposes a duty of 1½c. per lb.

NEW YORK.—Mr. Thomas J. Pope, under date Aug. 31, writes:—Speculation in our seaboard cities has during the past few weeks been quite active, imparting considerable animation to the various articles operated in. Among these in metals are copper, tin, lead, and latterly spelter. Our manufactures are, except those in military supplies, still languishing; but an improvement is expected in September, provided an amelioration commences in our political situation; indeed, such is absolutely essential to sustain recent speculation in metals, as the demand for new war material and contracts is nearly supplied already, while further political disaster would still more deplorably than ever derange our commercial and industrial interests. Under favourable circumstances our autumn trade may reach two-thirds its usual volume; but the low prices at which Indian corn, a great western staple, has sold during the past season at the seaboard have barely repaid freights hither, while the great fall in prices of most other agricultural staples will prevent our interior from buying as freely as its wants necessitate.

Copper: The foreign export demand continuing has induced large speculative transactions for the home market, and prices have advanced to 19½c., cash, for Lake Superior ingot, with transactions at 19c. These favourable prices have induced several shippers to throw their copper on this market. About one-third of the Lake supplies for the season have reached the seaboard; the shipments for the remaining three months will be necessarily heavy. Our seaboard smelters are still working. In the last Tariff Bill a clause for their benefit was inserted; it gives a drawback for the full amount of duties paid at import on all copper smelted here from foreign ores, or refined from foreign copper, provided such American smelted and refined coppers be exported to foreign countries. By this it will be seen that the eastern smelters will most likely smelt hereafter chiefly for foreign markets. The demand for consumption continues very light.

Iron: No change in price for Scotch or American pig; stocks of Scotch about 11,000 tons. A better demand is observable, but not sufficient to create better prices. Bars sell slowly, but prices and demand may be expected to improve in September. Prices are unchanged. Boiler-plate is active, and orders for shapes abundant. Rails, demand quiet; latest sale of Welsh, $35, cash; American rails, mill delivery, $34½ to $37, cash. Our railroads are patching up their lines of rail for the present, and may come into market for new rails for autumn and spring repairs in October. It is worthy of observation that the producing capacity of the American mills is not near adequate to the demand for repairs of our extended railroad system when in ordinary operation. The Erie road alone takes annually for repairs from 8000 to 12,000 tons of new rails.

Lead is in speculative demand, and the transactions are numerous at 5½c., cash, per lb.; prices are rising.

Speiter is in request at 4c., but holders 4¼c., cash; several transactions at 4½c. The domestic speiter produced at the Lehigh zinc mines in Bona is very small in quantity, and done at a high cost, about 4¾c. per lb., cash; its quality is very fine.

Tin sells at 25¼c., cash, for Straits, and 27½c. for Banca, under a combination arrangement as to prices.

Tin-plates: A moderate demand, and sell IC charcoal, $7 to $7½; IC coke, $6¼ to $6¾; terne coke, $5·66 to $5¾; terne charcoal, $6¾ to $7¼, per quality; store prices.

Another general engagement is expected. If the Government be successful prices will bound upwards; if the reverse, all recent gains in prices will at once be lost.

In the MINING SHARE MARKET a large and steady business has been transacted in shares generally, without that excitement for any particular stock which we sometimes observe. Tin has advanced in price, and with an improving standard for copper ores, we may fairly anticipate a continued demand for dividend and progressive mines. During the week, in some instances, shares rose considerably, but leave off flatter. The chief business has been in West Seton, Cook's Kitchen, Great Wheal Fortune, North Downs, Hingston Down, Ding Dong, Copper Hill, East Caradon, West Caradon, Wheal Seton, Wheal Margaret, Providence Mines, Wheal Ludcott, North Basset, East Basset, Trelyon Consols, Trelawny, Unity, Great Retallack, East Pool, New Treleigh, East Grenville, Drake Walls, Herodsfoot, Wheal Hope, Carn Camborne, Stray Park, Great South Tolgus, Tincroft, Marke Valley, Bryn Gwiog, South Caradon Wheal Hooper, Carn Brea, St. Day United, East Carn Brea, East Russell, Grenville, South Carn Brea, West Frances, &c. East Caradon shares have fluctuated up and down, owing to the activity of the jobbers, and declined from 28 to 25, leaving off 25¾ to 26¼. The latest official report values the 60 east worth 40*l.* per fm.—last week it was 90*l.* per fm.; the 60 west, worth 15*l.* per fm.; the 50 east, worth 30*l.* per fm. The latter, as we stated in our last, is a very important feature, showing the lengthening of the ore ground at that level, and it will be remembered before the eastern end, at the 50, was temporarily suspended a continuous course of ore was gone over for more than 100 fms. in length; and the end again improving in value as it goes into the heart of the sett is very encouraging. It is to be regretted, perhaps, that in any temporary falling off in the value of an end (such being the nature of the district), the shares should be made the object of attack in the market, as it frightens many timid holders, as well as deters others from investing. We believe if any shareholder, before attending to jobbing and "bearing" operations, would send an independent agent to inspect the mine, the cost of which would be very trifling, he would find that the mine is now the richest in Cornwall, and is only in its infancy. Of another thing, also, we are quite certain—that no mine of late years has done so much, by its great success, to encourage mining operations, or has been the means of bringing more capital into the market, for the good of "One and All," than East Caradon. West Seton shares advanced from 325 to 350, and have since declined, and leave off 330 to 340. We cannot learn the cause of the sudden rise, and it is to be regretted that the out-adventurers are not better informed of the changes that take place in the mine, especially when, for some months past, important points have been in progress, and expected to come off. Wheal Mary Ann, 9 to 10; at the meeting, on Tuesday, a dividend of 10s. per share (512*l.*) was declared, leaving 1508*l.* 11s. 2d. to credit of next account. The profit on the quarter was 878*l.* 11s. 6d. The report states the lode in the 170, north of Pollard's, is worth 5*l.* per fm.; the same level south is worth 6*l.* per fm. In the 110, south of the slide, an elvan course has been intersected, which is considered congenial for lead, and it is thought a lode or branch is near at hand. The stopes and pitches are producing about the same as usual. Great Wheal Fortune shares have been in good request, and have advanced to 14½, 15½. East Carn Brea, 8 to 8½; the lode in the 40 is 3 feet wide, producing 6 tons of copper ore per fm.; the winze below the 26 is worth 3 tons per fm.; the ore sold on Thursday (247 tons) realised 1736*l.* 6s. North Basset, 5½ to 5¾; the lode in Grace's shaft is 4 feet wide, with a leader of copper ore on the north side, worth 2 tons per fm.; in the 82 west the lode is worth 8*l.* per fm.; in the flat-rod shaft the lode is 2½ feet wide, yielding good stones of ore. Bryn Gwiog, 23 to 25; Calvadnack, 8 to 9. Carn Brea shares have advanced to 75, 77½. Copper Hill, 117½ to 122½. Ding Dong shares have advanced from 17½ to 25. Drake Walls, 18s. to 20s.; East Alfred, 32s. 6d. to 35s.; East Basset, 80 to 85; East Pool, 280 to 290; East Russell, 3¼ to 3½; Grambler and St. Aubyn, 11 to 13; Great South Tolgus, 4 to 4¼; Herodsfoot, 34 to 36. Hingston Down, 2¾ to 3; the lode in the 110 is looking more promising; the 100 is worth 20*l.* per fm.; the 85 end is not quite so good; the lode in the back is worth 70*l.* per fm. East Grenville, 39s. to 41s.; the lode in the engine-shaft is worth 27*l.* per fm. for tin and copper, and the eastern end having the appearance of being on the top of a deposit of ore. Lady Bertha, 15s. to 17s.; Long Rake, 10 to 12; Marke Valley, 10¼ to 10½; Merllyn, 15s. to 17s. 6d.; New Seton, 45 to 50; New Treleigh, 36s. to 38s. North Downs shares have been largely dealt in, and leave off 5¾ to 6. North Minera, 26s. 6d. to 28s. 6d.; Wheal Unity shares are flatter at 19s to 21s.; the 75 cross-cut is nearing the lode. Great Retallack, 24s. 6d. to 26s. 6d., well in demand; the shaft is down to the 45, and in the eastern end the lode is improving for lead. South Caradon Wheal Hooper shares have been extensively dealt in, and leave off 19s. to 21s.; the lode in the shaft is looking more promising. Rosewall Hill and Ransom United, 23s. to 25s.; the lode in the end, west of Troan, is reported worth 25*l.* per fm. North Treskerby, 24½ to 25½; Providence Mines, 42 to 44; Sortridge Consols, 7s. 6d. to 8s. 6d.; South Caradon, 300 to 305.

Wheal Hope, 1⅛ to 1¼; the end in the 14, the agent reports, has now a leader of lead all up and down the end, and still improving, and a fine discovery is looked for at the junction with the other lode in a few fathoms driving. South Carn Brea, 2¾ to 3; South Frances, 114 to 117; South Tolgus, 27½ to 30. St. Day United more in demand, owing to an improvement in the mine. St. Ives Consols, 30 to 32. Stray Park have advanced to 31, 33. Tincroft, 6 to 6½; Trelyon Consols, 17½ to 20; Vale of Towy, 4s. 6d. to 5s. 6d.; Wendron Consols, 12 to 14. West Caradon have advanced to 40, 42, and in request; the mine is looking better. West Frances, 13 to 14; West Rose Down, 15 to 16; West Trevelyan, 30s. to 32s. 6d.; Wheal Arthur, 7s. 6d. to 8s. 6d.; Wheal Baller, 85 to 90; Wheal Crebor, 9s. to 11s.; Wheal Grenville, 30s. to 32s. 6d.; Wheal Ludcott, 3¼ to 3¾. Wheal Margaret advanced to 48, but leave off 44 to 46. Wheal Seton, 80 to 85; Wheal Trelawny, 13 to 14. Rosewarne United, 20 to 22; at the meeting, on Monday, a call of 1*l.* per share was

made. The accounts showed 1053*l.* 16s. 3d. against the mine. The report states that the tribute department has much improved, particularly in the back of the 80, east of footway shaft, where the lode is worth 100*l.* per fathom. The next two-monthly sampling is expected to realise 2000*l.*

North Roskear, 17 to 19; a call of 1*l.* per share was made on Tuesday, the accounts showing 1215*l.* 8s. 4d. against the company. At the next account meeting the agents anticipate showing a profit. East Rosewarne, 25s. to 27s. 6d.; Wheal Kitty (Lelant), 6½ to 7; Bryndford Hall, 21 to 23. Wheal Pollard have been at merely a nominal price for some time past after a very heavy expenditure, but are now enquired for at a few shillings. The new lode lately cut is from 20 in. to 2 feet wide, consisting of gossan of a very fine description, equal, the agent reports, to the gossan at East Caradon: the mine adjoins Craddock Moor and West Caradon. Cook's Kitchen have advanced to 30, 32; at the meeting the accounts showed a profit of 576*l.* 18s. 10d. in the quarter, and a dividend of 612*l.* 10s., or 5s. per share, was declared, leaving 33*l.* 9s. 2d. balance in hand. The engine-shaft is down 14 feet below the 234, on the south part of the lode. The lode altogether in the shaft is 11 feet wide, worth 120*l.*, or for the length of the shaft 240*l.* per fm. The yield of tin throughout the mine is on the increase; though the tin sold and credited in the present account is 16*l.* per ton below the average of the price received in 1860. The mine is described as improving in depth, and the rise in tin must materially affect the returns. Par Consols, 9 to 9¼; the mine is looking better generally in the copper part; and in the tin department the returns are expected to be about 26 tons per month. Great Crinnis, 19s. to 21s.; the shaft will be down to the 120 in about a week. In the 100 west the leader is 3 feet wide, saving work. Cuddra, 2 to 2¼; the lode in back of the 60 east still continues worth from 1½ to 2 cwts. of black tin per 100 sacks. West Polmear have declined to 10s., 12s. 6d., upon a report circulated in the market that the first of the four lodes had been cut poor. It will be seen, however, from the agent's report, inserted in another column, and dated the 12th, that the lode has *not* been cut, but from the quantity of water issuing from the end, it is supposed to be very near at hand. Wheal Grylls, 4¾ to 5¼, and mine improved. Carn Camborne have been largely dealt in at 1⅞ to 1¾; the 10 fm. level from the winze has intersected the south lode, 2 feet wide, and very promising, although in the cross-course. In the adit above, a few feet from the cross-course, the lode is yielding rich ore.

On the Stock Exchange, transactions in Mining Shares have been of a limited character during the week. The following prices were officially recorded in British Mining Shares:—East Caradon, 27; North Downs, 5¾, 6¼, 6; West Seton, 340, 344, 347½, 335; Devon Great Consols, 350; Margaret, 44, 43; North Wheal Basset, 5¾, 5½; Providence, 40, 41, 42; Wheal Trelawny, 13; Clifford, 30; Hingston Down, 2¾. In Colonial Mining Shares the prices were:—Kapunda, 2⅛, 2¼; Port Phillip, 1; Bon Accord, 1; Great Northern Copper of South Australia, 1⅜. In Foreign Mining Shares the prices were:—St. John del Rey, 38¾, 38½, 38⅝, 38¾, 39, 38½; Cobre, 35½, 36; Mariquita, ⅜; United Mexican, 5⅜, 5½, 5⅜; Linares, 7⅛; Lusitanian 2.

The closing quotations for shares in new undertakings were:—Ocean Marine Insurance, 4½, 4¾ prem.; Thames and Mersey Marine, ¾, 1 prem.; Universal Marine Insurance, 1⅜, 1½ dis.; London and Provincial Marine, ⅛ dis., par; Oriental and General Marine, ¼, ¼ prem.; Mercantile Fire, ¼, 5-16 prem.; Commercial Union Fire, par; Bahia Steam, ¼, ½ prem.; East del Rey, ½, 1 prem.

COAL MARKET.—On Monday, the arrival of 103 fresh ships with a large quantity of house coal caused a dull business, at the prices of last week. In Hartley's and manufacturers' the demand was also languid, and prices rather lower. Best house coal, 17s. 6d. to 18s.; seconds, 15s. to 16s. 6d.; Hartley's, 14s. to 16s.; manufacturers', 12s. to 14s. per ton.—On Wednesday 67 ships arrived. There was more disposition to buy house coal, and a fair amount of sales effected, at fully Monday's quotations. Hartley's 6d. per ton lower. Manufacturers' steady, at previous value.—On Friday 21 ships arrived. There was a larger enquiry for house coal generally, and prices improved 3d. per ton. Hartley's and manufacturers' very heavy, at a slight reduction in value. Haswell Wallsend, 18s. 3d.; Lambton Wallsend, 17s. 9d.; Eden Main, 16s.; Pittington Wallsend, 15s.; Hartley's, 14s. to 15s. 6d.; Tanfield, 12s. 6d.; Holywell Main, 14s. 6d. per ton: 15 cargoes unsold—85 ships at sea.

At Redruth Ticketing, on Thursday, 3063 tons of ore were sold, realising 18,908*l.* 18s. The particulars of the sale were—Average standard, 130*l.* 1s.; average produce, 6¾; average price per ton, 6*l.* 3s.; quantity of fine copper, 210 tons 4 cwts. The following are the particulars:—

Date.	Tons.	Standard.	Produce.	Price per ton.	Ore copper.
Aug. 8	3015	£123 13 0	6⅝	£5 10 0	£82 8 0
" 22	4535	125 4 0	6¾	5 15 0	84 13 6
" 29	3150	131 14 0	6	5 4 6	81 17 0
Sept. 5	2968	127 8 0	7⅛	6 16 0	91 0 0
" 12	3063	130 1 0	6⅞	6 3 0	90 0 0

Compared with last week's sale, the standard remains stationary. Compared with the corresponding sale of last month, the advance has been in the standard 10*l.*, and in the price per ton of ore 12s. 6d.

At Wheal Mary Ann Mine meeting, on Tuesday (Capt. Peter Clymo in the chair), the accounts for the three months ending June showed—Balance last audit, 1141*l.* 19s. 8d.; lead ore sold, 5419*l.* 15s. 9d.=6561*l.* 15s. 5d.—Mine cost, merchants' bills, and sundries, 4541*l.* 4s. 3d.: leaving credit balance, 2020*l.* 11s. 2d. The profit on the three months' working was 878*l.* 11s. 6d. A dividend of 512*l.* (10s. per share) was declared, and 1508*l.* 11s. 2d. carried to credit of next account. Captains Clymo, Hodge, Harris, and Stevens, reported that the stopes and pitches were producing much the same as for some time past.

At the Great Caradon Mine meeting, on Thursday (Dr. Mathew in the chair), the accounts showed—Balance last audit, 33*l.* 11s.; May mine cost, merchants' bills, &c., 125*l.* 10s. 10d.; June, 122*l.* 2s. 7d.; July, 140*l.* 3s. 3d.=421*l.* 7s. 8d.—Call, 335*l.* 2s. 3d.: leaving debit balance, 26*l.* 5s. 5d. A call of 2s. per share was made. The agents' report was read, which appears in another column.

At the New Wheal Clifford meeting, on Sept. 5, the accounts for six months ending July showed a debit balance of 116*l.* 13s. 8d. All operations are suspended until outstanding calls are collected, and the purser was instructed to "cause the merchants to sue the refractory shareholders for the amount of their bills."

At the Worvas Downs Mine meeting, on Sept. 5, the accounts for May, June, and July showed a debit balance of 439*l.* 3s. 7d. A call of 1*l.* per share was made. It was resolved "that the mine be prosecuted with energy and economy; the ground already laid open confirming the opinion that a very short period will bring the mine into a state of profitable operation."

At the United Mines (Tavistock) meeting, on Thursday (Mr. J. A. Buckland in the chair), the accounts showed a debit balance of 516*l.* 19s. 5d. A call of 5s. per share was made, and it was agreed that the 1982 shares held in trust by the committee should be distributed *pro rata* amongst the present shareholders.

At the Caradon Consols Mine meeting, on Wednesday (Mr. Carleen in the chair), the accounts showed a credit balance of 56*l.* 12s. A call of 15s. per share was made.

At the Trelyon Consols Mine meeting, on Sept. 4, the accounts showed —Mine cost, May to July, 592*l.* 17s. 9d.; merchants' bills, &c., 197*l.* 14s. 4d.; coals, 52*l.* 6s. 3d. Trelyon Lower Mine (proportion of cost for the three months to end of June—less of Providence Mines for half of three months' water-charge—57*l.* 8s. 4d.)=900*l.* 6s. 8d. —Balance last audit, 16s. 5d.; tin sold, 702*l.* 16s. 10s.: leaving debit balance, 202*l.* 16s. 5d. The report of the agents stated that the new shaft was in a point of great importance, being in the heart of a run of good tin ground, and should be sunk with all dispatch. The pitwork and skip at the new shaft—which was set in operation since the last general meeting—works remarkably well, and greatly facilitates both the drainage of water and the discharge of stuff. Relative to Trelyon Lower Consols, the report stated they were returning about ½ ton of tin per month. They considered it a good piece of mineral ground, and when sufficiently laid open would be a lasting and remunerative one.

At North Roskear Mine meeting, on Tuesday, the accounts showed Balance last audit, 1118*l.* 17s. 11d.; mine cost, merchants' bills, and sundries, 2996*l.* 13s. 3d. =4115*l.* 11s. 2d.—Copper and tin ores sold and carriage, 2900*l.* 2s. 10d.: leaving debit balance, 1215*l.* 8s. 4d. A call of 1*l.* per share was made. Capts. Vivian, Dunkin, and Angove report that they expect by continuing their levels in the western ground to make important discoveries. The tribute department has improved a little since the last meeting. Their stamping-mills and burning-houses are in good working order, and they antiticipate a small profit at their next audit.

At South Wheal Betsy mine meeting, on Monday, the accounts for the three months ending July showed—Balance last audit, 19*l.* 0s. 1d.: mine cost and sundries, 255*l.* 11s. 1d.=274*l.* 11s. 2d.—Calls received, 200*l.* 5s.: leaving debit balance, 74*l.* 6s. 2d. A call of 1s. per share was made. Capt. Wm. Stephens reported upon the position and prospects of the mine. The water-wheel, pitwork, &c., are in good order and working well.

At Devon and Cornwall United Mines meeting, on Monday, the accounts for the three months ending July showed—Balance last audit, 1291*l.* 1s. 7d.; mine cost, merchants' bills, and sundries, 1204*l.* 3s. 3d.=2495*l.* 4s. 10d.—Ore sold and carriage, 540*l.* 11s. 10d.: leaving debit balance, 1954*l.* 13s. A call of 10s. per share was made. Capt. Thomas Neill reported upon the position and prospects of the mines, and recommended certain operations to be carried out. The cost of carrying out his suggestions will be 320*l.* per month, and in so doing the mines will be placed in a proper position for an extended workings hereafter, and with a fair prospect of opening out a valuable property. During the three months 80 fms. 4 ft. 1 in. of ground has been removed. The number of hands employed underground and at surface is 80. Capt. J. H. Hitchins also reported favourably upon the prospects of the undertaking.

At Rosewarne United Mines meeting, on Monday, the accounts for the four months ending July showed—Balance last audit, 1699*l.* 13s.; mine cost, merchants' bills, and sundries, 3368*l.* 18s. 7d.=5068*l.* 11s. 7d.—Calls received, 1698*l.* 2s. 8d.; copper and tin ores sold, 2316*l.* 12s. 8d.: leaving debit balance, 1053*l.* 16s. 3d. A call of 1*l.* per share was made. Capts. Richards, Woolcock, and Carthew report that the tribute department during the past two months has much improved, more particularly in the back of the 80, east of footway shaft, and in the back of the 80, between the cross-course and Jennings's shaft. At present the lode is worth 100*l.* per fm., and the setting day being on Friday next, it will work at a low tribute. In consequence of these improvements, they expect their next two-monthly sampling will realise above 2000*l.* In the accounts above referred to all the coal on the mine is charged, and the stock will last until the end of October.

At East Devon Great Consols Mine meeting, on Tuesday, the accounts for the three months ending July showed—Mine cost, merchants' bills, and sundries, 548*l.* 1s. 6d.—Balance last audit, 90*l.* 4s. 8d.; calls received, 425*l.*: leaving debit balance, 32*l.* 16s. 10d. A call of 2s. per share was made. Capts. Neill and Richards reported that they have every reason to believe that in the 52 the lode will be found productive and valuable. The engine continues to work remarkably well, and, with the pitwork, is in good order.

At West Wheal Frances meeting, on Sept. 4, the accounts showed—Balance last audit, 539*l.* 9s. 11d.; labour cost, for four months ending June, 658*l.* 11s. 1d.; merchants' bills, 384*l.* 13s.=1582*l.* 14s.—Calls received, 76*l.* 10s.: tin sold, 1471*l.* 3s. 3d.=8609*l.* 0s. 11d.—Mine cost, leaving debit balance, 572*l.* 3s. A call of 1*l.* 10s. per share was made.

At the Great Wheal Vor meeting, to be held on Wednesday, the accounts will show—Balance last audit, 2859*l.* 9s. 11d.; calls received, 76*l.* 10s.; tin sold, 3950*l.* 1s. 9d.; plant sold, 1719*l.* 1s. 3d.; sundries, 3*l.* 3s.=8609*l.* 0s. 11d.—Mine cost, 3576*l.* 14s. 3d.; dues, 209*l.* 12s. 6d.; London expenses, 193*l.* 10s. 4d.: leaving credit balance, 4624*l.* 3s. 2d. The profit on the three months' working was 29*l.* 3s. 11d. During the three months 51 fms. 3 ft. of ground has been removed.

The Worthing Mining Company (Limited) sold, at Liverpool, 32 tons of regulus, ex *Donald McKay*, for 33*l.* 10s. 6d. per ton, to Messrs. Newton, Keates, and Co.

LEEDS, SEPT. 12.—More business doing in Mining Shares, and previous quotations maintained. Some of the progressive mines are raising ore, and making progress towards a dividend state:—Brea Consols, 18s. to 20s.; Cornubia, 15s. to 17s.; Craven Moor, 3s. to 4s.; Hebden Moor, 20s. to 25s.; Merryfield, 5s. to 6s.; Nidderdale, par; North Hallenbeagle, 15s. to 20s.; North Jane, 2 to 2½; Wensleydale, 7s. to 8s.; Yorkshire, 10s. to 12s.—JOHN GLEDHILL AND CO.

SCHOOL OF MINES, BRISTOL.—We are happy to have to report that the School has re-opened, with a considerable increase in the numbers, which is very gratifying to all concerned. The capabilities of the School have been much increased by certain arrangements with the Trade School, by which the teaching of that institution is rendered available to the mining students; mathematics, chemistry, and mechanical drawing will thus be taught with more success. The usefulness of the School will also be increased by a series of evening lectures on geology, mineralogy, mining, chemistry, and mechanics.

OUR MINERAL WEALTH.—Sir R. Murchison, at the British Association meeting, said that by the labours of Mr. Robert Hunt, in sedulously collecting data from all quarters, we now become aware of the fact that we are consuming and exporting about 80,000,000 tons of coal annually (a prodigious recent increase, and daily augmenting). Of iron ore we raise and smelt upwards of 8,000,000 tons, producing 3,826,000 tons of pig-iron. Of copper ore we raise from our own mines 236,696 tons, which yield 15,968 tons of metallic copper; and from our native metallic minerals we obtain of tin 6695 tons; of lead, 63,525 tons; and of zinc, 4357 tons. The total annual value of our minerals and coals is estimated at 26,993,573*l.*, and that of the metals (produce of the minerals) and coals at 37,121,318*l.*

COLLIERY ACCIDENTS.—Two most important inquests were recently held in Cumberland, Mr. Dunn, the Government Inspector, being present. The first was at Crosby Colliery, where the spilling of the naphtha oil of a lamp set fire to the wood-work surrounding the pit top, which got extensively on fire before it could be stopped, during which it went down the shaft with the air current, setting fire to the furniture of the shaft 70 fms. deep, the smoke of which suffocated four persons and 16 horses. By the presence of mind of one of the deputies, the separation doors leading to the upcast shaft were opened, which drew away the smoke from the interior, where upwards of 40 persons were confined, otherwise all would have been sacrificed. This is an additional proof of the necessity of two shafts. The other inquest was at the Ellenborough Colliery, near to Maryport, where a quantity of gas had accumulated under the scaffold, and was set fire to by a reckless individual going into the shaft above with an ordinary oil lamp, instead of a safety-lamp, which he was ordered to do. The explosion blew up the scaffold, and threw him off the cradle on which he was working into the sump below, where there was 5 or 6 feet of water, which drowned him.

THE CLAY CROSS ACCIDENT.—In the *Mining Journal* of Aug. 24 we published the first list of subscriptions, amounting to 142*l.* 2s., since which time additional contributions to the extent of 25*l.* 17s. have also been received, raising the total to 168*l.* 19s. Subscriptions will still be received by the hon. sec. (Mr. George Barrow); by the mayor of Chesterfield (Mr. Shipton); and by any of the Derby and Chesterfield bankers.

WARING'S SAFETY-LAMP.—Almost the sole objection urged against the self-locking lamp invented by Mr. Waring, of Neath, has been removed. At the South Wales Institute the merits of the lamp were fully discussed. The president (Mr. L. Brough) said he might state that one of the objections to the lamp was the difficulty of getting the wire holding the extinguisher to act, without risk of becoming bent, unless it was of considerable diameter. In order to allow of free play in such case the orifice must be of proportionate size, which would give rise to danger, by allowing a possibility of the flame passing down. He thought the objection hardly tenable, but there was a liability to danger, unless Mr. Waring had succeeded in obviating it. With regard to the objection that the lamp may be opened by pressing down the gauze, it seems to apply only to a few of the first made lamps, in which the spring was too forward—an evil which had been entirely remedied in the lamp which we referred to in the *Mining Journal* of Nov. 3, 1860. The size of the wire to which Mr. Brough objects is in practice found to be free from objection, and the only remaining difficulty, that of the movement of the extinguisher on one side, is removed by employing a shield fitting, or nearly fitting, the interior of the gauze. In this case the shield of the extinguisher is made of perforated metal, and thus the second top or cover of gauze is rendered unnecessary.

UNDERGROUND MACHINERY.—At the South Wales Institute of Engineers a paper was read by Mr. James, "On Underground Machinery." After referring to the difficulty of employing steam for engines of this class, he remarks that the best and most practical engine that has yet been used for underground work, where steam is inadmissible, is that worked by air, compressed on the surface and carried underground in pipes; and it is one the use of which, from the success that has hitherto attended it, will very probably be much extended. The first of these engines was erected at Govan Colliery, near Glasgow, in 1849. The next air-engines erected were put up at the Haigh Collieries, near Wigan. From the results obtained, it is evident that air, whether under very great pressure, or a comparatively low one, can be readily employed as a means of transmitting power to considerable distances underground; and it becomes a question to what extent it can be economically, as well as safely, used. The leakage, if the joints are well made, is very small, and, together with the friction, need not form a serious loss; it is one, though, that it is difficult to calculate accurately. Their great recommendation, however, is their safety and the absence of all waste products, whether gas or water, which it would be troublesome to get rid of; this should go far to make up for even a heavy loss of power, and for increased consumption of small coal on the surface, and recommend them to everyone interested in underground machinery.

ENGLISH COAL, AND HUMAN POWER.—Professor Rogers estimates that nearly one-sixth of the total annual produce of our coal mines is used for the production of mechanical power alone, from which a power equal to that of 66,000,000 able-bodied men is obtained. Each acre of a seam yielding 3 feet of pure fuel is equal to about 5000 tons, and possesses a reserve of mechanical strength equal to the labour of 1600 men during their whole life; and each square mile of the same bed contains 8,000,000 tons of fuel, which is equal to 1,000,000 men labouring through 20 years of their ripe strength. Upon the same calculation, the total annual coal production of the United Kingdom (65,000,000 tons) is equal to the strength of 400,000,000 strong men, or more than double the number of adult males now upon the globe.

ROCK OIL AS A FUEL FOR STEAM-ENGINES.—Recent advices from America state that the application of the rock oil of Pennsylvania as a substitute for coal and wood for the generating of steam for engine purposes has proved highly successful. The apparatus employed consists of a series of iron pipes arranged within the fire-box; such pipes being perforated on the upper side with minute holes. The oil is supplied to these pipes by means of a force-pump, so that a continued pressure can be maintained. The space usually filled with fuel is thus filled with a spray of oil, which once ignited fills the fire arch and flues with flame, by which the boiler is heated. The Canadians naturally attach much importance to this invention, inasmuch as its successful development will do much to advance their home industry; the want of coal has hitherto been their great drawback, but, since the rock oil has been discovered in Canada beneath a large extent of surface, it follows that if it can be proved that that substance can be employed as fuel for the production of motive power for machinery, the obstacle will be in a great measure removed.

LEAD ORES.

Sold on the 22d August.

Mines.	Tons.	Price per ton.	Purchasers.
Carmarthen United	24	£11 10 6	Sims, Willyams, & Co.
Sold on the 7th September.			
North Minera	40	11 12 6	Newton, Keates, & Co.
Sold on the 3d September.			
Gogwinion	20	—	Stock & Co.
Sold on the 12th September.			
Macsyrerwddu	48	£12 10 0	Newton, Keates, & Co.
Coetia Llys	54	12 3 6	Walker, Parker, & Co.
Deep Level	15	11 8 6	ditto
Holywell Level	1	13 8 6	ditto
ditto	7	13 12 6	ditto
Brynford Hall	12	12 7 6	Newton, Keates, & Co.
Herward United	20	11 6 6	Walker, Parker, & Co.
Rhostamor	50	12 7 6	A. Eyton.
ditto	50	12 10 0	Newton, Keates, & Co.
Speedwell	5	11 9 0	Walker, Parker, & Co.
Orsedd	12	12 6 6	ditto
Merllyn	3	11 7 6	ditto
Parry's	30	12 6 0	ditto
Bryn Gwiog	28	12 6 0	A. Eyton.
Lady Eleanor	3	13 1 0	ditto
Grosvenor	20	12 12 6	Walker, Parker, & Co.
Ballyvirgin	12½	7 11 0	Newton, Keates, & Co.
ditto	10	12 0 6	A. Eyton.
Central Minera	50	13 14 6	Newton, Keates, & Co.
Isle of Man Mining Company	50	13 14 6	Walker, Parker, & Co.
ditto	30	12 7 6	Newton, Keates, & Co.
ditto			ditto

BLACK TIN.

Sold on the 28th August.

Mines.	Tons	c.	q.	lbs.	Price per ton.	Amount.	Purchasers.
Wh. Lushington	1	10	1	2	£62 10 0	£ 94 11 9	Calenick.
ditto	0	3	2	15	48 0 0	9 6 5	ditto
Sold on the 7th September.							
Pedn-an-drea	10	6	3	9	—	£ 678 18 5	Mellanear Co.
Sold on the 9th September.							
North Roskear	8	13	1	9	65 0 0	563 6 6	Angarrack.
ditto	3	5	2	25	63 7 6	208 5 0	ditto
ditto	0	16	1	12	63 7 6	51 16 6	ditto
Sold on the 11th September.							
United Mines	2	14	3	18	67 10 0	185 6 5	Calenick.
Sold on the 11th September.							
Penhalls	5	17	1	6	68 12 6	402 9 11	Bissoe Co.
Wh. Kitty	7	7	0	21	64 5 0	477 16 9	Bissoe Co.

COPPER REGULUS.

Sold at LIVERPOOL, ex *Donald McKay*.

Mines.	Tons.	Price per ton.	Purchasers.
Worthing Mining Company	32	£33 10 6	Newton, Keates, & Co.

COPPER ORES.

Sold at LIVERPOOL, by Mr. J. Pitcairn Campbell, on September 7.

Lot	Tons.	Price per ton.	Purchasers.
1 (ex *Hendrieka Roelina*)	34	£4 10 6	Newton, Keates, & Co.
2 (ex *Paul August*)	27	4 0 0	ditto
3 ditto	4	4 0 0	ditto
4 ditto	1¾	3 0 0	Charles Lambert.
5 ditto	¾	7 8 0	ditto

COPPER ORES.

Sampled Aug. 28, and sold at Tabb's Hotel, Redruth, Sept. 12.

Mines.	Tons.	Price.
West Basset	77	£6 7 6
ditto	75	6 14 0
ditto	84	4 7 6
ditto	63	4 3 0
ditto	39	5 10 6
ditto	53	5 10 0
ditto	44	9 7 6
Great Wheal Alfred	31	8 15 0
ditto	70	3 6 0
ditto	68	3 11 6
ditto	60	4 16 6
ditto	59	5 1 6
ditto	53	6 13 6
ditto	49	4 1 0
ditto	39	6 11 6
ditto	22	12 2 0
Alfred Consols	20	1 18 0
Nanspusker	86	3 10 6
ditto	70	11 5 6
ditto	53	1 3 0
ditto	20	4 7 0
Laity	18	12 10 6
ditto	16	6 12 0
Par Consols	7	2 9 0
ditto	83	8 16 0
ditto	74	12 6 6
ditto	72	8 13 0
ditto	35	4 6 6
East Carn Brea	100	6 15 0
ditto	83	3 18 0
ditto	64	11 10 6
Wheal Margery	67	9 5 6
ditto	57	2 19 6
ditto	54	3 18 6
ditto	53	3 18 6
Copper Hill	12	12 7 6
ditto	72	2 4 0
ditto	48	6 9 6

Mines.	Tons.	Price.
Copper Hill	44	£10 2 6
ditto	32	14 11 6
Tolvadden	43	4 9 6
ditto	32	4 1 6
ditto	30	5 5 6
ditto	28	6 13 6
ditto	24	7 9 6
ditto	13	4 17 6
ditto	11	5 12 0
Wheal Buller	9	18 0 0
ditto	69	3 16 6
Wheal Anna	43	9 16 6
ditto	69	4 14 6
West Alfred Consols	34	1 16 6
ditto	42	1 13 6
ditto	41	1 17 0
ditto	12	6 11 8
North Basset	40	4 7 0
ditto	28	6 10 6
ditto	25	5 1 6
Great South Tolgus	44	10 8 0
ditto	37	7 17 0
East Rosewarne	31	5 19 6
ditto	23	7 7 6
ditto	11	9 15 6
Wheal Agar	40	5 15 6
ditto	21	12 12 0
West Trevelyan	24	7 17 6
ditto	14	6 19 0
ditto	6	22 6 0
South Crenver	22	3 8 6
ditto	9	7 5 0
Bolling Well	27	1 18 6
Pedn-an-drea	11	4 8 6
ditto	7	12 14 6
Clijah and Wentworth	18	4 14 0
Rosewarne & Herland	4	2 17 6

TOTAL PRODUCE.

West Basset	466	£2836	1 0	North Basset	91	£ 470 10 6
Great Alfred	440	2175	17 6	Great South Tolgus	81	748 1 0
Alfred Consols, &c.	267	1550	19 6	East Rosewarne	65	462 7 6
Par Consols	264	2416	12 6	Wheal Agar	61	495 12 0
East Carn Brea	247	1736	6 0	West Trevelyan	44	420 2 0
Wheal Margery	243	1359	9 6	South Crenver	31	140 12 0
Copper Hill	196	1381	2 0	Bolling Well	27	51 19 6
Tolvadden	190	1134	7 0	Pedn-an-drea	18	137 15 0
Wheal Buller	112	684	13 6	Clijah & Went.	18	84 12 0
Wheal Anna	103	386	7 0	Rosewarne & Her.	4	11 10 6
West Alfred Con.	95	224	1 0			

Average Standard ..... £130 1 0 | Average Produce 6⅞
Average Price per ton £6 3 0
Quantity of Ore ..... 3063 tons | Quantity of Fine Copper, 210 tons 4 cwts.
Amount of Money £18,908 18 0
LAST SALE.—Average Standard ..... £127 8 0.—Average Produce 7⅛
Standard of corresponding sale last month, £123 13 0.—Produce, 6⅝.

COMPANIES BY WHOM THE ORES WERE PURCHASED.

Vivian and Sons	312	£1539 18 6
Freeman and Co.	193½	913 13 3
Grenfell and Sons	382	2875 14 6
Sims, Willyams, and Co.	213	1595 13 6
Williams, Foster, and Co.	329	2854 14 6
Mason and Elkington	467½	2815 14 9
F. Baukart	264	1481 13 0
Copper Miners' Company	450½	2770 10 0
Charles Lambert	126½	591 2 6
Newton, Keates, and Co.	75	502 10 0
Sweetland and Co.	270	967 13 6
Total	3063	£18,908 18 0

Copper ores for sale on Thursday next, at the Royal Hotel, Truro.—Mines and parcels.—Devon Great Consols 2033—Phœnix Mines 512—Marke Valley 352—East Caradon 302—Hingston Down 300—Hoimbush 280—East Russell 272—Lady Bertha 235—West Caradon 234—Bedford United 214—Gunnis Lake (Clitters) 205—Okel Tor 192—Wheal Emma 159—Wheal Friendship 155—South Bedford 125—Collacombe 104—Calstock Consols 102—Wheal Yarner 101—Kelly Bray 70—Bedford Consols 43—Trehill 40—Wheal Arthur 36—Hawkmoor 35—Brookwood 33—Gawton Copper 32—Fursdon 30—Harvey's Ore 15.—Total, 6211 tons.

Copper ores for sale on Thursday week, at the Royal Hotel, Truro.—Mines and parcels.—Great Wheal Busy 496—Wheal Clifford 474—Fowey Consols 410—South Caradon 405—North Treskerby 356—North Downs 314—Tywarnhaile 206—Craddock Moor 198—United Mines 135—Wheal Polmear 182—St. Day United 165—Wheal Moyle 101—Gonamena 83—Duchy and Peru 72—Perran Mines 62—Great Brigzan 52—Prideaux Wood 50—Treffry's Regulus 26—Wheal Leisure 11—East Damsel 8—Polbreen 8.—Total, 3874 tons.

SECOND SALE IN SEPTEMBER.

Years.	Tons.	Prod.	Amount.	Standard.	Ore copper.	Cake cop.
1850	3106	8½	£17,554 6 6	£100 11 0	£68 1 0	£79 10
1851	2848	8½	16,081 9 0	99 1 0	66 12 0	84 10
1853	3124	6⅞	20,063 4 0	133 14 0	93 12 0	102 10
1854	3850	6⅞	24,280 3 6	132 14 0	92 8 0	107 10
1855	4447	7⅛	31,097 12 6	137 11 0	98 14 0	126 0
1856	5150	6¾	37,119 17 6	146 4 0	105 17 0	126 0
1857	4404	7⅜	30,648 9 6	127 12 0	91 12 0	107 10
1858	4248	6½	28,085 13 6	147 15 0	101 16 0	121 10
1859	3628	6¾	21,237 19 6	127 7 0	86 18 0	102 10
1860	3191	6⅜	17,405 1 0	128 6 0	85 6 0	107 10
	3094	7¼	19,861 1 6	129 18 0	90 12 6	102 10

The copper in the ore expresses the nett price per ton of copper paid to the miner.

Copper Ores for sale at Swansea, Sept. 17.—Cuba 93, 86, 77, 8, 7, 8, 95, 93, 90, 11—Berehaven 128, 121, 102, 79—Cobre 101, 93, 16, 9—French ore 100, 100—Great Northern Mining Company of South Australia 49, 48, 39—Spanish 52, 48, 4, 1, 1—Knockmahen 99—Lochwinnoch 64, 32—Worthing Regulus 23—Australian 12, 6—Chili ore 5—Chili regulus 2—Cronebane 2, 1—Tigrony 2, 1—Phœnix regulus 2.—Total, 1910 tons.

THE ZAMORA TIN MINING COMPANY (LIMITED).

Capital £12,000, in 12,000 shares of £1 each, with power to increase.
Deposit 5s. per share, of which 2s. 6d. must be paid on application and 2s. 6d. on allotment; the remainder in calls of 5s., at intervals of not less than three months.

DIRECTORS.

HENRY HAYMEN, Esq., Clarendon-road, Kensington (Chairman).
EDMUND EDWARDS, Esq., C.E., 13, Beaufort-buildings.
Capt. J. COEPOYS HEASLOP, R.N., Elm Villa, Twickenham.
JOSEPH TILSTON, Esq., 2, Lower Kensington-gore.

SECRETARY—John E. Dawson, Esq.
AGENT IN SPAIN—Charles Simpson, Esq.
BROKER—George S. Herbert, Esq., 73, Old Broad-street.
BANKERS—The Bank of London, Threadneedle-street.
SOLICITORS—Messrs. Kimberley and Green, 26, Old Broad-street.
TEMPORARY OFFICES,—9, BROAD STREET BUILDINGS.

This company is formed for the purpose of purchasing and working certain mines or setts of tin ground, situate on the banks of the River Douro, in the province of Zamora, Spain. The mines are comprehended in two separate properties, one of twelve mining setts, the other of four such setts, equal together to nearly 350 acres.

There is a large and regular demand for tin in Spain, whither considerable quantities are yearly exported from England.

The price agreed to be paid for the property is £4000, with a royalty of only 1-25th. By the arrangements made with the vendors, the whole of the £4000 is to be paid in shares of the company. These shares will not possess any advantage over the other shares as regards dividends, which will be declared from time to time at per share, and not on the amount paid, and it is agreed that these shares shall not receive any dividend until a dividend of 10 per cent. has been paid out of the profits upon the ordinary shares.

As there is a positive certainty of getting tin ore as soon as the company commences working, the undertaking may be fairly looked upon as one promising great and lasting profits, and affording an opportunity to the public for investing money under circumstances which justify the belief that large returns may be considered certain in a very short time.

If sufficient shares be not applied for, or no allotment be made, the deposit will be returned in full without deduction or delay.

Forms of application can be obtained at the temporary offices of the company, or at the bankers or brokers.

No application will be received for less than five shares.

THE CHESTERFIELD AND MIDLAND SILKSTONE COLLIERY COMPANY (LIMITED).

Capital £40,000, in 8000 shares of £5 each (with power to increase).

DIRECTORS.

J. SAY SPARKES, Esq., H.E.I.C.S., Brunswick Villas, St. John's Wood, London, W.
WILLIAM MITCHELL, Esq., 54, Gracechurch-street, London, E.C.
HENRY BROWNRIGG, Esq., 33, Lime-street, London, E.C.
GEORGE BROCKLEBANK, Esq., Gloucester-place, Greenwich.
GEORGE SENIOR, Esq., Coalowner, Barnsley.
Major CHARLES SANDERS, The Ingrams, Thirsk.
(With power to add to their number.)

MANAGING DIRECTOR—John Say Sparkes, Esq., H.E.I.C.S.
BANKERS—London and County Joint Stock, Lombard-street, London, E.C.
SOLICITORS—Messrs. Courtenay and Croome, 9, Gracechurch-street, London, E.C.
BROKER—Charles W. Marten, Esq., 26, Throgmorton-street, London, E.C.
CONSULTING COLLIERY ENGINEERS—Messrs. Brown and Jeffcock, Sheffield and Barnsley.
SECRETARY AND ENGINEER—James Wright, Esq., C.E.
OFFICES,—LONDON, 42, BRIDGE STREET, BLACKFRIARS.

PROSPECTUS.

This company is incorporated for the purpose of establishing a colliery, and raising the well-known Silkstone coal upon the estates of the Dukes of Devonshire and Rutland, at Sheepbridge, in the vicinity of Chesterfield.

The moderate depth of this bed of coal, which can be reached and worked in about four months, the very small cost at which it can be raised, the first-rate quality of the coal always commanding the highest prices, and its contiguity to the Midland Railway, render this field one of the most valuable coal properties in England.

The existence of the coal, and the cheap rate at which it can be obtained, as proved by borings and shafts already sunk both in and around the field, entirely remove this undertaking from anything like risk or speculation, and thus afford an opportunity seldom met with for moderate capitalists to invest in one of the most profitable and important productions in the kingdom.

From accurate surveys made by the most eminent mineral engineers, the directors can with confidence predict that the returns upon the capital will, at the very least, be 21 per cent., while the facilities for winning the coal are such as to render it almost a certainty that dividends will be paid within twelve months from the commencement of the works.

The coal is the Silkstone, well known as the best suited for domestic use, and for which the demand both in the locality of the works, as well as in London, is almost unlimited, and at the highest prices.

The shafts will be sunk in proximity with the Midland Railway, communicating and having extensive sidings therewith, thus enabling the company to forward the coal by rail from the pit's mouth to any town or port in the country.

The coal field comprises about 600 acres, and is estimated to contain nearly 4,000,000 tons of coals. The lease is for a term of 36 years, and held at a very moderate rental of £210 per acre; of which a minimum of about 17 acres per year must be removed; hence the company has no sum to pay as a bonus for the lease, as is usually the case; and no portion of the capital will be applied to any purpose, save the construction of the works, and the prosecution of the business of the company.

The lessors have also bound themselves to construct and keep in repair for a moderate sum the branch line of rail to join the pits with the Midland Railway, and to provide all the requisite sidings thereto; also to convey thither all the company's coal at a fixed charge of 6d. per ton haulage.

It is a well-known fact, that some collieries when the engineering operations are scientifically conducted, from 800 to 1000 tons per day are continuously raised. The arrangements of the proposed company will easily produce that quantity; but taking the low daily average of 700 tons, and estimating 290 working days, there would be raised 200,000 tons annually. In order, however, to be from any exaggeration, the calculations of profit have been based upon 175,000 tons only. From the reports given by different mineral surveyors, some of which are appended hereto, and taking the highest of their estimates, it will be seen that the coal can be raised and put into the railway wagons at a cost not exceeding 4s. 6d. per ton (including all royalties, expense of management, and a fair allowance for the redemption of capital expended in opening the colliery). After deducting these from the lowest prices now ruling in the neighbourhood, there is left a clear average profit of 1s. per ton, or an annual income of £8750, being upwards of 22 per cent. on the total capital of £40,000, even should the whole be required.

It should also be observed that the foregoing estimates do not include the profit to be derived from coking the refuse coal, or taking advantage of any more favourable market than can be commanded at the pit's mouth, although the directors feel great confidence that from the facilities they will possess of supplying the London, Sheffield, and French markets much greater profits will be realised.

Although the directors have fixed the capital nominally at £40,000, it is almost certain that little over two-thirds of that amount will ever be required; hence it is thought probable that the total calls on each share will not exceed £3 10s. at most; these will be asked for in 10s. per share on application, £1 on allotment, and the remainder in calls of £1 each as required; and in no case will the calls be at less intervals than three months.

A considerable amount of the capital being already subscribed, as soon as the directors think the requisite number of shares applied for, they will commence the works; at the same time, unless at least one half of the capital be subscribed, all deposits will be returned in full.

The company being completely registered with limited liability, no shareholder can, under any circumstances, be made responsible for a greater amount than that unpaid upon the shares for which he subscribes. No payment, either in shares or money, will be given to the projectors for promoting the company.

Application for the remaining shares to be made in the annexed form, to the bankers, brokers, or at the company's office, 42, Bridge-street, Blackfriars, London, E.C.

Extract from the Report furnished by the eminent Colliery Engineers, Messrs. BROWN and JEFFCOCK, of Sheffield and Barnsley, who have under their superintendence the principal large collieries in South Yorkshire.

GENTLEMEN,—Having carefully examined the estate, and made a very full investigation of the nature of the project, we are enabled to report that in our opinion a very favourable opportunity is presented of opening out a large and profitable colliery. Without going fully into details, which we can give, if desired, upon a future occasion, we beg to state that the seam of coal is the Silkstone, or Black shale, so well known in the London market; and there is every reason to believe it will be found of good quality. The thickness, as proved by boring near the site which will be the best for the winning, is 5 feet. We estimate the cost of opening the colliery here at £12,000, in case there is not a large quantity of water met with (and which we do not apprehend); should, however, much water be found, it will necessitate the employment of a larger engine and pumps, and, perhaps, entail an additional cost of £2000 or £3000. The above estimates are exclusive of the cost of constructing the railway and sidings, and of erecting coke ovens, if found desirable to do so. The quantity of coal to be raised should not be less than from 100,000 to 150,000 tons per annum, and we estimate the cost of working, inclusive of interest upon capital, at 4s. 6d. per ton. We have made enquiries as to the sale price of the coal at the Midland Railway sidings, and we have ascertained that the average price will not be less than 5s. 6d. per ton, thus leaving the profit at least 1s. per ton, which upon 150,000 tons would be £7500, or 40½ per cent. upon an outlay of £18,500. This is supposing the coal to be all sold; but the small coal would probably be more advantageously made into coke. The cost of erecting 100 coke ovens, with apparatus for washing the small coal, would be from £3000 to £4000; this outlay would, no doubt, be compensated for by the increased price obtained for the coke beyond the value of the small coal from which it would be made.

BROWN AND JEFFCOCK, Civil and Mining Engineers.
To the Directors of the Chesterfield and Midland Colliery Company.

Extract from the Report of THOMAS HARRISON, Esq., Colliery Engineer, Barnsley (a gentleman largely connected with the Yorkshire Collieries).

GENTLEMEN,—The field consists of about 600 acres; the coal is at a moderate depth, and is of first-rate quality; the price, £210, is a fair one, and the vicinity to the Midland Railway are advantages which, in my opinion, render it one of the most desirable and valuable in the county, and one which will yield very large returns, if proper capital and management be applied. My estimate of the costs is as follows:—

Sinking three pits, with engine, machinery, and all necessary buildings, appliances, plant, and stock	£9320	0	0	
Cost of railway to pits	3500	0	0	
One hundred coke ovens, at £25 each	2500	0	0	= £15,320 0 0
Say in all £16,000.				

The above plant will be sufficient to raise at least 150,000 tons annually. I estimate the cost of obtaining the coals, including all labour, agency, interest, depreciation of capital, haulage, and royalty, at 4s. 3d. per ton.

150,000 tons at 5s. 7d. (the average selling price), if coke be made of the small coal	£41,875	0	0
Deduct cost of obtaining same, at 4s. 3d.	31,875	0	0
Leaving a profit of	£10,000	0	0

Or above 66 per cent. of the capital used.

THOMAS HARRISON.

FORM OF APPLICATION FOR SHARES.

To the Directors of the Chesterfield and Midland Silkstone Colliery Company (Limited).

GENTLEMEN,—I hereby request you to allot me shares in the above company; and I hereby agree to accept such shares, or any less number that you may be pleased to allot me, subject to the company's Articles of Association.

Dated this day of , 186 . Name .....
Address .....

Clay Cross Colliery Accident.

CLAY CROSS COLLIERY ACCIDENT.—SUBSCRIPTIONS RECEIVED SINCE LAST ADVERTISEMENT:—

The Rev. John Bateman	£2	0	0
The Grassmoor Company, Hasland	15	0	0
Cuthbert Oliver, Esq., Chesterfield	5	0	0
J. S. Crossley, Esq., Derby	5	0	0
Mr. Tyndal	1	0	0
G. R. Stephenson, Esq., London	25	0	0
Peter Huggie, Esq., Gateshead	10	10	0
Mr. F. E. Martin, sen., Chesterfield	2	2	0
Mr. Britt, Chesterfield	1	1	0
The Butterley Company, Alfreton	50	0	0
Charrington, Sells, and Co., London	15	15	0
Mr. Thos. Evans, Nottingham	1	0	0
Rev. R. C. Wiley, Clay Cross	1	0	0
Mrs. E. Smith, Chesterfield	1	0	0
Calow Independent Sunday School	0	15	0
Mr. Robt. Howe, Clay Cross	0	10	6
Mrs. E. Smith, Chesterfield (additional)	5	0	0
Dr. Bright, Overton Hall, Ashover	10	0	0
Mr. J. B. White, Chesterfield	1	1	0
Mr. Davenport, Chesterfield	1	0	0
Miss Clay, Bank Close	3	0	0
John Frown, Esq., Rosehill	5	0	0
Mr. J. Smith, Traffic-street, Derby	5	0	0
Mr. E. Merchant, Derby	1	0	0
The Patent Rivet Company, Smethwick	2	2	0
Messrs. Newall and Co., Gateshead	5	0	0
Messrs. Wade, Son, and Co., Hull	5	0	0
Mr. John Wilson, Alfreton	5	0	0
John Hickman, Esq., Market Harborough	5	0	0
W. Palmer Morewood, Esq., Alfreton	20	0	0
The Wingerworth Coal Company	25	0	0
Messrs. Roe and Son, Derby	5	0	0
John Ward, Esq., Clay Cross	1	1	0
Capt. Pierce, Whittington	5	0	0
John Rhodes, Esq., Woodthorpe, near Sheffield	1	1	0
Henry Bangeley, Esq., Unstone	3	3	0
Messrs. Lucas and Sons, Dronfield	5	5	0
Mr. Richard Wright, Dronfield	0	10	0
Andrew Badger and Sons, Fall's Wood	1	1	0

Subscriptions will be received by the Mayor of Chesterfield, the Derby and Chesterfield banks, and by the Honorary Secretary.

GEORGE BARROW, Hon. Sec.
Chesterfield, Sept. 11, 1861.

Now ready, price 1s.,

THE PROGRESS OF MINING IN 1860, BEING THE SEVENTEENTH ANNUAL REVIEW.

By J. Y. WATSON, F.G.S., Author of the *Compendium of British Mining* (published in 1843), *Gleanings among Mines and Miners*, &c.

The SIXTEENTH ANNUAL REVIEW OF MINING PROGRESS appeared in the MINING JOURNAL of December 31, 1859, and January 7, 1860.

A FEW COPIES of the REVIEW OF 1855, containing Statistics of the Metal Trade, the Dividends and Percentage Paid by British and Foreign Mining Companies, and the State and Prospects of upwards of 200 Mines. Also a FEW COPIES of the REVIEW OF 1852, 1853, and 1854, MAY BE HAD on application at Messrs. WATSON and CUELL'S Mining offices, 1, St. Michael's-alley, Cornhill, London.

Also, STATISTICS OF THE MINING INTEREST. By W. H. CUELL.

WATSON AND CUELL'S MINING CIRCULAR, published every Thursday morning, price 6d. or £1 1s. per annum, contains Special Reports of Mines, and the Latest Intelligence from the Mining Districts, from an exclusive resident agent; also, Special Recommendations and Advice upon all subjects connected with Mining, and interesting to Investors and speculators. A Record of Daily Transactions in the Share Market, Metal Sales, and General Share Lists, &c. Edited by J. Y. WATSON F.G.S., and published by WATSON and CUELL, 1, St. Michael's-alley, Cornhill.

N.B. Messrs. WATSON and CUELL have made a selection of a few dividend and progressive mines, which they have reason to believe will pay good interest, with a probability, also, of a rise in value, the names and particulars of which will be furnished on application.

INVESTMENTS IN BRITISH MINES.—Mr. MURCHISON'S REVIEW OF BRITISH MINING for the QUARTER ENDING 30TH MARCH, 1861, with Particulars of the Principal Dividend and Progressive Mines, Table of the Dividends Paid in the last Five Years, &c., is NOW READY.

Price One Shilling. At 117, Bishopsgate-street Within, London, E.C.

Reliable information and advice will at any time be given on application.

Also, COPIES of "BRITISH MINES CONSIDERED AS AN INVESTMENT." By J. H. MURCHISON, Esq., F.G.S., F.S.S. Pp. 356, boards, price 3s. 6d., by post 4s. See advertisement in another column.

COAL.

Just published in 12mo., price 2s.,

OUR BLACK DIAMONDS: THEIR ORIGIN, USE, AND VALUE.

By THOMAS PLIMSOLL. With illustrations on wood.
London: John Weale, 59, High Holborn, W.C.

GEOLOGICAL MAPS.

A GEOLOGICAL MAP OF ENGLAND AND WALES.

By Sir RODERICK I. MURCHISON, D.C.L., &c.
Fourth Edition. Scale, 28 miles to the inch. Beautifully Coloured. Sheet, 5s.; mounted in case, 7s.

A GEOLOGICAL MAP OF ENGLAND AND WALES.

By ANDREW RAMSAY, F.R.S. and F.G.S., &c.
Scale, 17 miles to the inch. Beautifully coloured. Sheet, £1 1s.; in case, £1 5s.; on rollers, £1 10s.

As regards maps, the novice in this country will find the guide he requires in the beautiful map of England and Wales, by Prof. Ramsay, which contains in a condensed form the result of the labours of many men, continued through half a century.—*Quarterly Review*.
London: Edward Stanford, 6, Charing-cross, S.W.

NEW PATENT ACT.—Mr. CAMPIN, having advocated Patent Law Reform before the Government and Legislature, and in the pages of the *Mining Journal*, &c., now ADVISES and ASSISTS INVENTORS.

The CIRCULAR of INFORMATION gratis, on application to the Patent Office and Designs Registry, 156, Strand.

Notices to Correspondents.

IRON CASTINGS.—I should be glad to learn from any of your correspondents their opinions upon the following:—1. What pig-irons are best calculated to make castings of the densest and most compact structure?—2. What would give additional hardness to the surface of such castings when made in iron moulds?—INQUIRER.

OXIDE OF SILVER.—As one of the many deeply interested in the question as to the existence of oxide of silver in enormous quantities in the neighbourhood of the ordinary metallic silver deposits, I beg to enquire, at this distance of time, whether the assertions of your correspondent, "Chemicus" (*Mining Journal*, 29th March), have been verified, or proved fallacious? I am so conscious of the value of space in the Journal, and of the requirements to meet the interests of so many, that I have delayed this enquiry much longer than my interest has patiently borne.—J. P.

TREATMENT OF LOW-PRICE COPPER ORES.—In the discussions which have recently taken place in the Journal relative to the treatment of the low-price copper ores, I have not seen any reference made to Mr. Longmaid's patented process for the same, and should, therefore, feel obliged if any of your readers, or Mr. Longmaid, will furnish me with the details, as the economical treatment of low-price ores is of the highest importance to the mining interests of the kingdom.—J. L.

THE SOUTH FRANCES MANAGER.—At the last account of South Frances objection was taken against Capt. Pascoe's holding the management of any other mine. If it be improper in the case of Capt. Pascoe to hold pluralities, is it not equally objectionable in other mine managers? I could name about a dozen persons who hold about as many situations: Mr. F. Pryor manages nearly 20 mines; Capt. Pope, of Wheal Basset, about 6; Capt. Charles Thomas, about 8; Capt. J. Vivian, about 6 or 8, &c. Why object to Capt. Pascoe any more than others? The manager of Dolcoath has a much better salary there than Captain Pascoe has at South Frances, and yet he is manager also of West Seton, Stray Park, Cook's Kitchen, West Frances, Calvadnack, &c., and I never heard that Dolcoath adventurers sustained a penny loss by his absence on the other mines. Have not respect of persons in your decisions; treat all alike. Many of the adventurers in South Frances are, I believe, also in some of the other mines that I have named.—AGENT: *Redruth, Sept.* 11.

CASARA MINE.—I was glad to read, in last week's Journal, the remarks of your correspondent as to this company, for the conduct of the directors is inexplicable, and demands a full and impartial investigation by a competent committee of independent shareholders. In January last, a statement of the capital, liabilities, and assets was laid before the annual meeting, which was in every way satisfactory, and from the report of the directors the future prospects were deemed very encouraging, and we, the shareholders, had full confidence in the management. Early in February I was surprised to find the London management was transferred to another office. I was still more surprised to find that Capt. S. Harpur was made the resident agent and manager at the mine; my surprise, however, was made very agreeable for a time, when I read in your Journal the weekly reports signed by this Capt. Harpur during the months of May and June, and the several notices based thereon. These reports were deemed so very good, that during this period the shares were marked in the Share List as having had a *bona fide* advance from 8s. to 12s. per share—that is, full 50 per cent. This advance was quite natural, when we read from week to week that "an important discovery has been made in this mine; a new lode has been cut in the 30 fm. level, worth 25 cwts. of lead per fm. That a new lode of very great promise has been intersected in the 30 fm. level, and some of the oldest miners say it is the finest looking lode ever seen in the mine. That 38 tons of lead ore was sold in the past week, and 20 to 30 tons more will be got ready as soon as possible. That, in addition to the improvement noticed last week, the new lode is still yielding 20 cwts. of lead ore per fm.; the old lode in the 30 is worth 20 cwts. of lead ore per fm., and is still improving; the winze is worth from 10 to 12 cwts. per fm., and the mine never looked so well as at present." Now, these reports and statements are either true or false. If true, what quantity of lead ore has been broken from these valuable deposits since the 1st of May, when these flourishing reports began? What sum of money has it been sold for? What have been the costs during this period? And why is the company to be wound-up? If they are false, for what purpose have they been made and published to the world? The directors are in a most awkward dilemma: either they have been most grossly misled and imposed upon by these reports, or, having been published to the world, they have allowed them to go uncontradicted, knowing them to be false. I believe they have always been considered men of honour and integrity: indeed, the whole affair is involved in mystery, but it is not impenetrable, and your last week's correspondent may well ask "What it all means?" Have any of the influential shareholders been to the mine to elicit the truth? If so, I hope they will unravel the apparent mystery.—A SHAREHOLDER.

THE LOWER TALDRWS SLATE COMPANY.—In last week's Journal it was stated that 8104*l.* 17s. 10d. had been paid for the property, *and* 8646*l.* 16s. 9d. had been expended upon plant; but it would appear that the total amount expended, including purchase of quarry, plant, machinery, &c., was comprised in the sum of 8646*l.* 16s. 9d.

GREAT WHEAL VOR.—I wish some correspondent would draw a few useful deductions from the statement issued by the respected director of Great Wheal Vor. I peruse no statement with equal satisfaction, yet in the issue of costs and returns I am perfectly at sea in what constitutes a rich mine. For instance:—

Jan., Feb., and March cost, 1860, amounted to	£3505 19 6
Tin sold in three months	5693 7 5
Loss	£2812 12 1

The ground driven was 47 fms., at a cost of 181*l.* per fm., or 8505*l.* 19s. 6d.; the produce averaged on the said 47 fms. 121*l.* per fm. In the statement just issued, it will be seen that the costs are 3941*l.* 6s. 8d.; and sales, 3970*l.* 10s. 7d. Ground sunk and driven, 51½ fms., averaging 78*l.* per fm. value, and to get this marketable it costs about the same money. So it will be seen, whether ground is worth 121*l.* or 78*l.* per fathom., the costs, by some singular mining process, advance or decline with the value of the lode.—C.

COAL STATISTICS—"A. B.," (Leith).—The returns were for the year 1860: a similar statement appears in the Journal about the same date in each year.

"HONOUR TO WHOM HONOUR IS DUE."—I have been a little amused at reading the report attached to the Wheal Margaret statement of accounts last issued, and bearing date Aug. 27. In the last paragraph the agents say—"We are much pleased at being able to inform you that after a long trial we have succeeded in 'introducing' a better system of separating the pulverised tinstuff," &c. Now, as this refers to the new plan of circular buddle, I think it is only fair to Capt. Wm. Hollow and the agents of the Providence Mines to say that the new buddle was invented by them. The idea being first given by Barlase's patent, and after repeated trials the present one was decided on, put in practice, and has succeeded beyond expectations. Capt. Treweeke, when first told of the proposed plan, said it would never answer, and that it was contrary to the laws of Nature, &c. However, after the Providence buddle was well at work, and proved so efficient, he and one of the subordinate agents came privately to the mine and looked at it—they again came publicly, saw its working, highly approved of it, and then had one constructed on precisely the same plan. Now, Sir, as I know these are facts, I cannot help remarking on the unfairness of the Wheal Margaret agents in so coolly assuming the credit, and, therefore, I think the facts should be made known. —A PROVIDENCE SHAREHOLDER: *Camborne, Sept.* 10.

GREAT WHEAL MARTHA.—In the Notices to Correspondents in last week's Journal a complaint is made by a party who has recently become a shareholder. In reply thereto I beg to state that the directors of this company always meet on the exact days fixed for the board meetings. As regards the certificates of shares, I cannot forward them before they are officially signed; and in the case referred to there were impediments that could not be controlled by—E. EVANS, Secretary: *Sept.* 13.

GREAT WHEAL MARTHA.—Is this company constituted with limited liability? If so, why do the officials occasionally issue cost-book transfers, and at other times limited liability transfers, with an *ad valorem* duty?—A SHAREHOLDER.

DEVON KAPUNDA MINING COMPANY.—I will thank you for some information respecting this company in the Journal of Saturday. I am a shareholder, and have paid up the whole amount of the calls upon me, but can learn nothing as to the state of the company's affairs. I wrote to the secretary about a month ago, and in the course of a few days I received a letter from the dead letter office, with the following answer:—"Gone away, not known where." You will infer from this that I should be glad to know the locale of the secretary, or of any of the directors.—A. B.: *Bradford.*

LAS MINAS.—He recibido la carta; la semana que viene.

THE DOLGELLY MINING DISTRICT.—There was a slight inaccuracy in the report of your Dolgelly correspondent, which I shall feel obliged if you will correct. He states that the Penmaen Mine is now being worked by a French company. This is not the case, the owners being two Englishmen. No doubt, the error arose from the fact that M. Hubert and his partners are now opening out an adjoining sett, called the Tyddynmawr sett, which is an extension of the main lode of the Penmaen. I am not surprised at the sanguine tone of your correspondent's report, for there is no doubt the county of Merioneth is richly mineralised, and that there is a better day dawning for the mining interests of that county. The rich discoveries at Clogau will no doubt stimulate enterprise, as there is no doubt the precious metal is widely scattered through the country. It has been found in not less than six lodes in the Penmaen, and it is believed that it can be extracted in such quantities as to amply repay all expenses of mining and reduction.—H. J.

FORT PHILLIP AND COLONIAL GOLD COMPANY.—Would any of your correspondents be good enough to state whether shareholders in this company are liable for more than the amount of their shares—that is to say, whether, under any circumstances, they could be called upon for more than 4*l.* per share in addition to the 1*l.* already paid? Having heard several opinions expressed upon the subject, I should like really to know how the matter stands, and feel I can adopt no better means of being well informed on the point than by applying to you.—B. M. R.

SOUTH DEVON MINING COMPANY.—The letter of "G. R." cannot appear without the name of the writer being appended.

MR. HOPKINSON ON THE INDICATOR.—We have received a lengthened communication from Mr. Hopkinson, originally addressed to the editor of the *Engineer*, in which he complains of his work on the Indicator being too harshly reviewed, and of his being denied an opportunity of answering the arguments adduced in disparagement of his book; but, however much we may regret that the criticisms of our contemporary are not to his mind, and that orthographical inaccuracies should have been referred to in the work of a practical and uneducated workman, we must remind Mr. Hopkinson that if he forwards his works to the editor of a journal, he must be content with the editor's opinion—be it what it may; and we may also tell him, that to the critic egotism and unnecessary reference to the defects of others are so repulsive as to tend to induce a feeling anything but favourable towards the author or his book. As an inventor Mr. Hopkinson has been very successful; if he be less so as an author he must console himself that few succeed in the attempt to excel in all things, and that he has the satisfaction of knowing that the object for which his work was written—that of proving to the users of steam-power that it would be advantageous to them to apply his Indicator—has been accomplished as completely as he could have hoped it to be. Mr. Hopkinson had better now let the matter rest.

PRACTICAL COAL MINING.—I presume, from my illegible writing, a mistake has occurred in my note, under the head of Notices to Correspondents, of Sept. 7. Instead of from "*ten in* the dip and *ten in* the rise," it ought to have been "*zero on* the dip and *zero on* the rise."—S. M.

THE MINING EXCHANGE.—The letter of "A Well-wisher to Mining" should be forwarded to the Chairman, who will pay every attention to the matter complained of.

PRACTICAL PAPERS ON COLLIERY OPERATIONS.—A pressure of matter compels us to postpone the letter from Mr. Goodwin, intended for our present Journal—it shall, however, appear next week, together with several other communications now necessarily deferred.

THE MINING JOURNAL

Railway and Commercial Gazette.

LONDON, SEPTEMBER 14, 1861.

FOREIGN MINING, AND THE NEW TARIFFS—No. V.

An important consideration in connection with the coal trade in France is the expense attending the transport of minerals, of which the French themselves complain very sharply (witness the report of the Administration of the Mines de la Grand'-Combe, recently noticed at some length under this head). The railway tariffs, like everything else in France, are "organised," and if the French are not a nation of shopkeepers, their Government is the greatest speculative trader in the world, for it has a finger in every commercial pie. Besides organising gigantic steam-navigation enterprises, encouraging agriculturists with an institution of credit (although with regard to this, by-the-bye, we were informed verbally a short time since by a French gentleman that it had little more than a nominal existence, being intended more for show than anything else), lending money to deserving merchants, &c., it is now dabbling in railways on a rather large scale, and will, of course, in doing so look pretty closely to governmental interests, and take care to keep up pretty high tariffs. Thus conventions entered into with the six leading railway companies of France—the Orleans, Paris-Lyons-Mediterranean, Northern, Eastern, Western, and Southern—bind the French Government to pay an annual guaranteed interest of 4·65 per cent. per annum during 50 years, commencing Jan. 1, 1865, on the by no means inconsiderable sum of 3,085,000,000 fr., for 8578 kilometres of new railways, classified under the general term of the "new network." As it is just possible that these new lines may not all prove very remunerative—indeed, many of the railways latterly opened in France yield but moderate returns,—and as the money required for their construction has been raised by obligations issued by the companies, bearing an annual charge for interest and replacement of 5·75 per cent., the companies may have to make up some of the difference of 1·10 per cent. Further, the Government with, at any rate, a theoretical eye to the main chance has bound the companies to pay over all the nett profits on their original systems over and above the following sums per annum per kilometre:—

System.	From Jan. 1, 1865, to total completion of the new lines.	After completion of the new lines.
Orleans	Frs. 25,000	Frs. 27,400
Lyons	35,400	37,400
Northern	37,400	38,400
Eastern	27,000	27,800
Western	25,700	26,700
Southern	18,300	19,500

The effect of all this will be to maintain the very highest possible rates of transport; and as already some impatient spirits are clamouring for a third network, the industry of the future seems mortgaged to an almost indefinite extent, while externally the French Cabinet has proclaimed a reign of free trade or, at any rate, an approach to it. It is this which makes many Frenchmen so timid of foreign competition; they know that they are

hampered in their operations at home, while they fear they shall have to deal with others not so fettered abroad. Sooner or later the present fussy, meddlesome *régime* must come to an end, and Frenchmen must be left more dependent on their exertions, and have their energies less restricted. The French colonies have generally suffered from the same over-officious bureaucratic interference, and have languished, in consequence, like sickly exotics; while robust British settlements, when left as much as possible to themselves, have attained a prosperity of which their early founders never dreamed. The maxims of some old political economist—"The best Government is that which governs the least," might be adopted with great advantage by our lively neighbours, who, when they have once learned to rely on themselves, would no doubt find that many of the fears which they have morbidly nursed with regard to foreign competition were altogether groundless, while the remainder were very much exaggerated.

It appears from a report prepared by M. Gonot, engineer-director of mines in the province of Hainaut, that several attempts are being made to develope fresh coal pits in Belgium. Near Wiers, on the north-western boundary of the coal basin already being worked, the Compagnie Houillère de Don, of which M. Toffart is the director, undertook, at the commencement of last year the sinking of a pit, which in April last, to which date M. Gonot brings down his report, had reached a total depth of 93½ metres (about 315 feet). The strata encountered before the carboniferous formation was reached extended over 39 metres. At a depth of 81·40 metres, arrangements have been made for cutting again the beds known to exist from soundings which preceded the sinking of the pit. A boring made by the same company, 175 metres to the south-west of its existing pit, has resulted in the discovery of a carboniferous formation at a depth of 25·75 metres. The boring was stopped at 70 metres in schistous earth, which appeared to be the passage from coal schist to phtanite. The society having a concession of the Blaton-Bernissart colliery, has carried on at Harchies, at a point situated 1140 metres to the south-west of the church, a sounding which attained coal-earth at a depth of 279·97 metres; while a bed of coal, 0·45 metre in thickness, was cut at a depth of 286 metres. While this boring was being made, and when the sounding had reached a depth of about 100 metres, water spouted up even to a height of 5·20 metres above the soil; its ascensional force diminished little by little, but when the spouting column did not rise higher than 1·20 metres, it still delivered 666 litres per minute (a litre is as nearly as possible an English quart). At Pommercœul, the same society (Blaton-Bernissart) undertook, about 820 metres to the west of the church, and near the southern side of the road leading from Pommercœul to Calvaire Petiau, a sounding which commenced July 27, 1860, had attained on the 28th of April last a depth of 293·76 metres, without, however, striking a coal formation; at any rate, no mention is made of such a successful result having been achieved, and one may be pretty sure it would have been noticed if possible. From 289·43 metres to 289·91 metres, water proceeding from a brown sandstone rose even to the surface, although in doing so it had, it will be seen, to ascend about 900 ft. English. A French company, represented by M. Camus, has pierced, to the north of the canal in the same neighbourhood and near the route from Thulin to Ville-Pommercœul, a boring which, on April 21 last, had attained a depth of 306 metres; but at that depth it does not appear that coal had been struck. A second sounding, undertaken last year by Messrs. Toffart and Company, in the west and southern angle formed by the route from Thulin to Ville-Pommercœul and the canal from Mons to Condé, attained coal-earth at a depth of 283·02 metres on May 29 last, and within the last few weeks has struck a little bed of superior coal about 0·30 metre thick, at a depth of 302 metres. A falling in, which has been now repaired, has temporarily interrupted this sounding, which Messrs. Toffart propose to continue, in order to cut other beds of coal, and to indicate as much as possible their approximate inclination. At Hensies, a sounding made by a French firm (Messrs. Averlant-Danel and Co.), at 585 metres to the south of the church, and to the east of the road leading from the Quiévrain station to the village of Hensies, met with coal-earth in August, 1860, at a depth of 255 metres. In consequence of a falling in, which occasioned a rupture of the column of tubes, the boring was abandoned at a depth of 280 metres, without having discovered any combustible, except some traces of coal at depths of 269 metres, 279·40 metres 279·50 metres, and 280 metres. The total depth of the St. Hubert extraction pit of the Société de Sirault, the only one which the society had in activity at the date of the report, is 85 metres, and that of the ventilating pit and ladders 78 metres. Two beds of coal-earth inclining from 20° to 30° to the south, have been pierced directly by these pits. The first, or Carpentier vein, is from 0·20 to 0·25 metre in thickness, and is situated at 39 metres from the surface in the pit of extraction; the second, or Cambier vein, is of about the same extent at 53 metres from the surface. At this last point two transverse galleries have been pierced, one towards the south, which extends 63 metres from the pit, and the other towards the north, 112·40 metres in length, which has attained at this distance the bed called Bracquart, 0·40 metre thick, when it is regular. At 94·80 metres from the pit, in this last gallery, after the explosion of a mine, a very strong jet of water, proceeding from old workings, inundated all the works; and on the surface the earthworks, which had filled up an old pit (the existence of which was unknown), gave way, and caused a large circular opening, between 3 and 4 metres deep. At a depth of 78 metres a southern gallery, 40 metres in length, has recut the Cambier bed, in which some explorations have been made, and at the same level a gallery has been pierced towards the north, and in the direction of the Bracquart vein. Some exploratory works have also been executed to the west of the pit, at a depth of 53 metres, in the Cambier and Bracquart veins. At Baudour three soundings have been made by the Société de l'Esperance, the first of which was abandoned in March, at a depth of 277 metres, after having penetrated coal-earth from a depth of 47·40 metres, and having traversed three beds of coal, 0·30, 0·87, and 0·92 metre in thickness, lying vertically at the respective depths of 230, 241, and 273·82 metres. The second was abandoned in August, 1860, at a slight depth, and was replaced by another boring pierced at a little distance to the south, which had attained a depth of about 50 metres when M. Gonot collated the facts embodied in his report. The third boring, situated 1160 metres to the south of Baudour church, attained coal-earth at a depth of 229·80 metres, and after having been carried 20·26 metres further was abandoned without having met with a bed of coal. At Mons, early in 1857, Messrs. Demot and Co. undertook, at a point 1210 metres to the north-east of the point of intersection of the route from Mons to Obourg, and that from Mons to Rœulx, a sounding which reached coal-earth at 301·10 metres from the surface. In March last this boring had been carried 76·90 metres further, but a coal bed had not been reached. At Havré, the sounding which the Société Charbonnière du Bois-du-Luc has pierced near the route from Mons to Rœulx, which was retarded last year by a falling in, which occurred between 208 metres and 268 metres of the depth, has since found coal-earth at a depth of 277·33 metres, and the boring, besides meeting with several veins, has struck three beds of coal, of 0·85, 0·79, and 0·99 metre in thickness, following a vertical direction at the respective depths of 284·92, 304·46, and 349·13 metres. A sounding made by the same society at a point 170 metres to the south of the church of the hamlet of Ghislage, had reached in April a depth of 242 metres, but does not appear to have resulted in the discovery of coal. At Thieu the seventeenth sounding of the Société de Strépy-Bracquegnies at 500 metres to the north-west of the church, has attained coal earth at a depth of 138 metres, after having traversed 24·30 metres of shifting sand, the total thickness of sand met with at this point being 53 metres. At Harmignies, the total depth of the first pit of the Société du Levant de Mons was by the latest advices collected by M. Gonot 253 metres in depth; it had consequently penetrated 113 metres into the coal-earth, which presents itself in irregular stratifications inclining to the west, but no workable bed of coal had been discovered. A French society has undertaken the piercing of two soundings at Rœulx. The first, situated 100 metres to the north-west of the point where the route from Soignies to Mariemont traverses the northern bounds of the commune of Strépy-Bracquegnies, was commenced on Jan. 8, 1861, and was abandoned in March at a depth of 60·30 metres in phtanite. The second sounding, situated about 18 metres to the north of the point above indicated, was commenced on the 7th of March last, and on the 29th of the same month reached a depth of 55·93 metres in phtanite, above which rock the boring had pierced a little coal schist. At St. Vaast, at the commencement of the year, at the Bonne Esperance pit of the Société de St. Vaast, the moveable iron prism of the apparatus invented by M. Guibal for traversing shifting sands had reached a depth of 112·84 metres, and had penetrated 6·24 metres into coal-earth. Several attempts have been made to drain off the water, which has been an awkward impediment, but from the want of homogeneity and consistence in the earth met with, irruptions are continually occurring. At Ressaix the Société Charbonnière de Mont-St.-Aldégonde has resumed its exploratory works, and has reached coal by a gallery to the north from its pit, the bed pierced at a level of 89·40 metres from the surface having a thickness of from 0·60 to 0·70 metre of earthy coal at an inclination varying from 65° to the north to 75° to the south. The pit at the same place of Messrs. E. de Smedt and Co. had reached on the 5th of March a depth of 190 metres; at 180 metres a gallery has been pierced towards the north, which at the date of the advices on which M. Gonot founded his report had attained a length of 118·70 metres, having struck at 61·60, 74, and 90·70 metres, three beds of coal in very regular layers, the first and third 0·35 and the second from 0·20 to 0·25 metre in thickness. The Société des Dames undertook, at Leval-Trahegnies, near the route from Mons to Charleroi, the sinking of a pit, which attained coal-earth at 19·10 metres from the soil, soon also a little vein of coal, and two metres further several little beds of coal; but in penetrating further, only schist in winding masses was met with. In the same commune the first pit of the Société du Bois de la Haye had in March attained a total depth of 258 metres, and at the level of 245 metres a gallery had been pierced towards the north, which had reached at the same date a length of 24 metres. In increasing the depth of its second pit at Anderlues, which has reached a depth of 200·45 metres, and has penetrated 111·30 metres into coal-earth, the same society has met with two new beds of coal, which it has named St. Désirée and St. Honoré, and which have the valuable thickness of 0·80 and 0·85 metre. These beds were attained, the first at 178·95 metres, and the second at 185·90 metres, and they incline to the south; some exploratory works have been made in these beds at a level of 188 metres. The deepening of the second pit of the Société Mourlon Gendebien has been prosecuted, and after having traversed 109·30 metres of tertiary and secondary earth, coal-earth was reached. This had been traversed in March to the extent of 21 metres, and two small beds of coal had been struck at 2·30 and 9 metres. At Fontaine-l'Evêque, the Société du Midi d'Enderlues has given up a sounding which it had been making for many months. The sounding was abandoned in coal-earth at a depth of 100·60 metres, after having pierced at 85·40 and 77·20 metres, combustible having vertical thicknesses of 1·60 metres and 0·80 metre respectively. At Bois d'Haine the drainage of the pit of the Société du Bois d'Haine is being effected at a depth of 114 metres, by two pumps, having plunging pistons of 0·39 metre diameter. Some exploratory works are being pursued in the bed of coal attained directly by the pit of extraction at a depth of 102·40 metres. This bed, which contains also sulphurous iron, is 0·50 metre in thickness, is composed of two lines of coal, separated by 0·10 metre of earth, and presents a variable inclination to the west. At Fayt-lez-Seneffe the first pit of Messrs. Dupont and Co. has reached a total depth of 100 metres; it attained coal-earth at 50·45 metres from the surface, and traversed a bed of coal 0·47 metre in thickness, at a depth of 82 metres. The same firm is about to commence the piercing of a second pit, situated 42 metres to the north of the first. The second sounding, undertaken to the north of Bellecourt, by Messrs. Deschamps and Co., has been abandoned at 160·20 metres in coal-earth, which it had penetrated to the extent of 117·60 metres, having traversed at 96·05, 164, and 168·38 metres, three beds of coal, 0·30, 0·67, and 0·25 metre in thickness, and lying vertically. The same firm undertook in August, 1860, the piercing of a third sounding in the same neighbourhood, which has been abandoned (in consequence of the impossibility of withdrawing a broken auger) at a depth of 77·95 metres in coal-earth, which was reached at 19·20 metres. Three beds of coal of 0·40, 0·25, and 0·38 metre in thickness, were struck at depths of 21, 26·60, and 52 metres. At Gouy-lez-Piéton two soundings pierced near Nardon bridge have been abandoned at depths of 67 and 61 metres in phtanite. At Chapelle-lez-Herlaincourt the same firm has commenced the piercing of a third sounding, which in April had attained a depth of 93·08 metres in the midst of carboniferous earth, after having struck at 70·45 metres a bed of coal 0·50 metre in thickness, and following a vertical direction. From these facts, which we have been at some pains in recapitulating, it will be seen that fresh riches are being freely developed in the Belgian coal basins, which promise to prove fully equal to almost any demand which may be made upon them.

Advices from Auxerre state that unlooked-for mineral wealth has just been discovered in that part of France (which is about 90 miles south-east of Paris), several engineers having indicated the existence in the arrondissement of Avallon of coal bearings of remarkable value. These bearings extend under the territory of the communes of Magny, St. Germain-des-Champs, Cussy-les-Forges, Bussières, St. Magnence, and St. Brancher, and are prolonged by beds of little thickness under several communes bordering on the Côte-d'Or. If the brilliant hopes which have been excited by the extent and thickness of these carboniferous beds are realised, the department will, no doubt, soon attain a foremost rank in the march of French industry. The formation of a railway between Avalon and Auxerre has been decided upon, and the works are now commenced. At Auxerre the coal obtained would be placed in connection with the existing great railway systems of the French empire.

The exportation of minerals from Belgium has in the first seven months of the current year reached a total of 97,277,006 kilos., as compared with 94,786,585 kilos. in the corresponding seven months of 1860. The latest advices from St. Dizier state that forging *fonte* has been in comparatively calm demand, the producers not having more disposable, while the buyers of the district had supplied themselves for some time, and distant purchasers held to some extent aloof, as they considered that the price of *fonte* was relatively too high as compared with the price of iron. More than 3,000,000 kilos. of *fonte* were, however, purchased in Aug., a considerable total taking into account the number of blast-furnaces in activity. The average price of *fonte* during Aug. was 124½ fr. The latest intelligence from Charleroi states that the blast-furnaces of that district have little stock, the *fonte* being absorbed as fast as it is produced; the rolling establishments have also abundant orders, and prices are firm: altogether the state of the market is summed up as satisfactory. There has not been much doing in coal, but the production of coke is being carried on to a greater extent, several new ovens having been constructed. In reference to the exportation of minerals from the province of Santander (Spain), to which allusion was recently made in the *Mining Journal*, it appears that it amounted in July to 43,063 metrical quintals (a metrical quintal is 100 kilogrammes, or about 231 lbs. English). This total was thus made up:—Ironstone, 10,100 quintals; pyrites of copper, 1500 quintals; calamine (native carbonate of zinc), 31,463 quintals. The shipments were as follows:—Ironstone: Cardiff, 6800 quintals; Bristol (the foreign journal from which we derive our information spells this word Briston), 1200 quintals; Neath (our foreign statitician calls this in his peculiar orthography "Neast," but we hope we have caught his meaning), 600 quintals; and Pontypool, the word is confusingly rendered "Hontepool," 1500 quintals. Pyrites of copper: Swansea, 1500 quintals. Calamine: Swansea, 4324 quintals; Antwerp, 23,739 quintals; Maryport, 3400 quintals. Some important transactions have taken place in copper at Paris, holders remaining firm. At Havre 297,000 kilogrammes Lake Superior have been dealt in at 230 frs. to 235 frs. The German markets for copper have also been well sustained, consumers being desirous to provide themselves with good stocks. In tin and lead things are quiet, but prices are maintained. The demand for zinc continues active at Paris and in the German markets.

UTILISATION OF WASTE MINERAL SUBSTANCES.—The Society of Engineers opened its session on Monday evening, under the presidency of Mr. H. P. Stephenson, when a carefully-prepared and highly instructive paper was read by Mr. G. E. Edwards, upon the increasingly important subject of the "Utilisation of Waste Mineral Substances." The author stated it was not his object to advance any new theories or processes, nor to attempt to exhaust the wide field which the subject presented, but rather to describe some of the more important methods which have been proposed or adopted for turning to account substances hitherto either partially or entirely valueless. Among the most important of these coal was spoken of as accumulating largely at the pits' mouths of collieries, and as having been until recently regarded as almost without value. Its application at present to the manufacture of coke and compressed fuel was described, and Bérard's machine for the purpose of freeing this waste coal from iron pyrites and shale, the presence of which in coke is very detrimental. He then explained the principles upon which this is effected by washing, which is dependent upon the different velocities with which bodies of the same size, but of different specific gravities, or of the same specific gravity but of different sizes, fall through water. Messrs. Edwards and Beacher's machine was mentioned, and another recently patented by the author described, in which, while much simpler and more durable, the serious defects of the former are avoided, and, moreover, in every way adapted to the required purpose. The method of coking the coal thus prepared, and Morton's patent kiln, having been referred to, the author alluded to the different methods adopted, and their respective advantages, for the formation of compressed fuel from small coal. The extraction of ores from mineral waste was described as being effected by the same machine as that already mentioned, and of which specimens were exhibited; and the condition, percentage of ore, cost of operation, and the value o the metal obtained, on which the success of the process depends, were pointed out, as well as the advantage of such machinery wherever ore or waste had to be operated upon. The author showed how small a percentage of copper was worth extracting chemically from poor ores, and explained the processes adopted. The utilisation of slag from iron and other furnaces was then considered, and the author thought it would be extremely useful for building purposes, where the cost of transit was trifling, the great difficulty of annealing having prevented the success of the several attempts made to use it for ornamental and other purposes. After having alluded to the reworking of waste wrought-iron scrap, the employment of waste gases of furnaces, and having described the processes of Mr. Ransome and others for the production of artificial stone, by the use of a solution of flints in caustic soda as a cementing ingredient, the author concluded by a hope that additional valuable information, more extended than the scope of the paper would allow, might be elicited in discussion.

COAL MINES AND THE TEMPERATURE OF THE EARTH'S CRUST.

Mr. FAIRBAIRN, the President of the British Association, submitted the following "Remarks on the Temperature of the Earth's Crust, as exhibited by thermometer returns, obtained during the sinking of the deep mine at Dukinfield." He said that it is now more than ten years since a series of experiments were commenced to determine the temperature at which certain substances become fluid under pressure. These experiments had reference to the density, point of fusion, and conducting power of the materials of which the earth's crust is composed, and were prosecuted with a view to the solution of some questions regarding the probable thickness of the earth's crust. Contemporaneously with these, we were fortunate in being able to ascertain by direct experiments, under very favourable circumstances, the increase of temperature in the earth's crust itself. These observations were obtained by means of thermometers placed in bore-holes at various depths during the sinking of one of the deepest mines in England—the coal mine belonging to Mr. F. D. Astley, at Dukinfield. The bore-holes were driven to such a depth as to be unaffected by the temperature of the shaft, and the thermometers were left in them for periods varying from half an hour to two hours. It is very difficult to arrive at accurate data on the subject of the increase of temperature in the earth's crust. The experiments hitherto made give, unfortunately, somewhat conflicting results, and even in the same mine the rate of increase of temperature is by no means uniform. This is shown very clearly in the results obtained by Mr. Astley. It is scarcely probable, however, that the temperature in the mine shaft influenced the results, and we must, therefore, seek the cause of this irregularity in the varying conducting power of the different strata, arising from different density, and different degress of moisture of the strata. As to the rate of increase, they appear to confirm previous experiments, in which it has been shown that the temperature increases directly as the depth. The rate is at first rather less than this, afterwards somewhat greater, and at last again less, but on the whole the straight line on which the temperature increases as the depths nearly expresses the mean of the experiments. The amount of increase indicated in these experiments is from 50° to 57¾°, as the depth increases from 5¾ yards to 231 yards, or an increase of 1° in 99 feet. But if we take the results which are more reliable—those between the depths of 231 and 685 yards—we have an increase of temperature from 57¾° to 70¼°, or 17½° Fahr. That is a mean increase of 1° in 76·8 ft. This rate of increase is not widely different from that observed by other authorities. Wallerden and Arago found an increase of 1° in 59 feet in the artesian well at Grenelle. At the salt works at Rehnie, where an artesian well penetrates to a depth of 760 yards, or rather more than the Dukinfield Mine, the increase is 1° in 54·7 feet. MM. De la Rive and Marcet found an increase of 1° in 57 ft. at Geneva. Other experiments have an increase of 1° in 71 ft. In one respect the observations in the Dukinfield Mine are peculiarly interesting. As they give the temperature in various descriptions of rock, they appear to prove what has hitherto been partially suspected—that the conducting powers of the rocks exercise a considerable influence on the temperature of the strata. If we add to this the influence of the percolation of water, we shall probably have a sufficient explanation of the irregularities observed in the experiments. From the above observations we have evidence of the existence in the earth of central heat, the temperature, so far as can be ascertained, increasing in the simple ratio of the depth. I do not, however, presume to offer an opinion as to whether this increase continues to infinitely greater depths than we have yet penetrated, as observations upon this point are still imperfect. But, assuming as an hypothesis the law which prevails to the depth of 700 yards continues to operate at still greater depths, we arrive at the conclusion that at a depth of less than two and a half miles the temperature of boiling water would be reached, and at a depth of 10 miles a temperature of 3000° Fahr., which we may assume to be sufficient to melt the most refractory rocks of which the earth's crust is composed. If, therefore, no other circumstance modified the conditions of liquefaction, all within a thin crust of this thickness would be in a fluid state. This, however, is not the case. At these depths the fusing point is modified by the pressure and conductibility of the rocks. We know that in volcanic districts, where the great subterranean laboratory of nature is partially opened for our inspection, the molten mass, relieved from pressure, pours forth from volcanic craters currents of lava, which form a peculiar class of rocks. Besides this, it has been ascertained from experiments made by Mr. Hopkins on various soft substances, such as spermaceti, wax, and sulphur, that the temperature of fusion increases about 1·8 Fahr. for every 500 lbs. pressure per square inch—that is, in other words, that the temperature of fusion under pressure is increased in that ratio. If we assume this to be the law for the materials of the earth's crust, and correct our previous calculations in accordance with it, we shall find that we shall have to go to a depth of 65 miles, instead of merely 40, before the point of fusion of the rocks is reached. It must, however, be observed that Mr. Hopkins's later experiments with tin and barytes do not show such an increase of the point of fusion in consequence of pressure, and he is led to the belief that it is only in the more compressible substances that the law holds true. Independently of this, however, Mr. Hopkins points out to me that in the above calculation it is assumed that the conductivity of the rocks is the same at great depths as at the surface. In opposition to this he has shown experimentally that the conducting power for heat is at least twice as great for the dense igneous rocks as for the more superficial sedimentary formations of clay, sand, chalk, &c. And these close-grained igneous rocks are those which we believe must most resemble the rocks at great depths below the surface. Now, Mr. Hopkins shows that if the conductive power were doubled, the increase of depth, corresponding to a given increase of temperature, would be doubled, and we should probably have to descend 80 or 100 miles to reach a temperature of 3000°, besides the further increase which investigation may show to be due to the influence of pressure on the temperature of fusion. Mr Hopkins, therefore, concludes that the extreme thinness of the crust assumed by some geologists to account for volcanic phenomena is untenable. Calculations on entirely independent data led him to conclude that the thickness did not fall short of 800, instead of 30 or 40 miles. If it be so much, he is further led to believe that the superficial temperature of the crust is due to some other cause than an internal fluid of nucleus. It remains a problem, therefore, which my friend, Mr. Hopkins, is endeavouring to solve, as to what is the actual condition of the earth at great depths, and the relation of terrestrial heat to volcanic phenomena.

Mr. HOPKINS said the communication which had been made by the President of the Association was worthy of more confidence than any which had hitherto been given to the public. No former treatises on this point had so largely taken into account the various circumstances in connection with mines, and the causes incident to them, which affected the temperature of the earth's crust. The condition of the rocks and wells, as well as the water in mines, must necessarily have a varying effect upon the temperature, and these facts had not received sufficient attention at the hands of those who had made experiments, but the President had now gone largely into it. One great advantage likely to result from the experiments explained in the President's paper was that the experiments had been made in a virgin mine, before it had been worked, and the temperature ascertained before being altered by working. Now, as regarded the mine in question, the strata was very much inclined, and there was a good deal of water in it. That being the case, great caution was required in working it, because a wet mine gave a higher temperature than a dry mine. Hitherto there had been very great difficulty in making observations and experiments in mines. He had had some discussions with Professor Phillips, on the subject, and he hoped that before long they would arrive at some process by which they would be enabled to make more satisfactory and conclusive experiments of the continually varying temperature in these mines, and its effects upon the incrustation of the earth. He referred, at some length, to his own experiments in mines, remarking that the temperature sensibly affected the earth's crust. He did not mean to say, as had been asserted by some, that the earth's crust was 800 miles, but he felt satisfied, from his own observations, that it must be more than 100 or 200 miles.

Prof. HENNESSEY spoke at some length on the subject, disputing the views advanced by Mr. Hopkins as to the extent of the earth's crust. He was proceeding with a general argument, when

The PRESIDENT interposed, and said Prof. Hennessey was going into a detailed mathematical question, which was not exactly before the section. He admitted that it was a most important question, but he thought it was inconvenient now to go into the details of the mathematical part of the subject, for Mr. Hopkins would have to reply, and they were very much pressed for time.

Prof. HENNESSEY said that after the President's remarks he would not go further into the subject.

The PRESIDENT remarked that he felt it was a very important subject indeed, and he was unwilling to prevent the discussion proceeding, but Prof. Hennessey would, no doubt, see the position in which the section was placed as regarded time.

Mr. HOPKINS said that when the opportunity served, he should be quite prepared to combat Prof. Hennessey's theory.

The PRESIDENT said he might observe that the whole of the upper surface of this mine, to 1200 ft., discharged water, but below it was quite dry.

After some further discussion, on the motion of the President, a vote of thanks to Mr. Fairbairn for his valuable paper was carried with acclamation.

THE INTERNAL HEAT OF THE GLOBE.—Prof. ROGERS read some extracts from a paper by Prof. W. Thomson, entitled "An Examination of some points in the Doctrine of the Internal Heat of the Globe." The chief points advanced are referred to in the following discussion, which ensued after the reading of the communication:—Prof. HENNESSEY said the geological bearing of the paper was simply to account for the former very high temperature that appeared to have existed at the earth's surface; or the great difference between the climate at present existing and that which was revealed to us by the presence of organic remains in certain portions of the earth, which could not have been there unless a very different climate had existed at remote epochs from that which now exists. What connection this had with our solar system, and the possibility of the sun decreasing in its calorific power, was a point of great importance; but he (Prof. Hennessey) would beg to observe that it was not competent fully to account for all the phenomena which were disclosed by geology. The result of very high temperature would, of course, be to increase the heat very much in the tropical parts of the earth, without a very much corresponding increase towards the polar regions. As far as he could learn, the tendency of early geology went to prove that a greater uniformity of heat existed at those remote epochs than existed at the present; whereas the conclusion to be arrived at from the paper just read would be that, on the contrary, a much greater diversity of temperature existed at former epochs. There might be an interior source of temperature, such as that pointed out by Sir Charles Lyell, which might possibly influence the surface.—Mr. Thomson stated that the heating power of the materials of the earth's crust would not alone sufficiently account for the temperature of the earth at remote epochs, but that

they should account for it, perhaps, by the influence of moisture, thermal springs, and other sources. The examination of temperature in mines and other localities showed that the increase of temperature in descending from the earth's surface towards the interior depended not merely on the conductive power of the material, but in the predominancy of moisture, or the passage of vapours through the fissures, and the general structure of the rocks. Mr. Thomson had referred to the astronomical existence of the possibility of our earth acquiring a higher degree of temperature by passing amongst a great number of stars at a former epoch. That question was settled immediately by this consideration—if it had passed sufficiently near to any star or stars to acquire such a very high temperature, the rims would practically form a double star; and if any considerable elevation of temperature resulted, and any thermal influence, there would also be communicated the gravitating influence. There was good reason to believe that at no former epoch of the earth's existence did we approach sufficiently near to any star to allow those bodies to greatly influence our temperature.—Mr. PENGELLY doubted very much whether there was any evidence to show the previous higher temperature of the earth.—Mr. SIMMONS said that there was very strong proof that some of the most ancient geological remains had been deposited without any very high temperature.—Mr. JUKES argued, from the appearance of ancient rocks, that the state of the globe had been very much in the condition in which it was now, even in the earliest geological period.—Mr. GRAH remarked that the atmosphere modified very considerably the conditions of the temperature of the earth, and, of course, that would affect the fossils found in it.—Prof. ROGERS said there was no questioning the influence of changes in the thermal condition of the earth. There was evidence of a far larger amount of moisture in the earlier ages; and the earth must have been fully ten times as rich in the carboniferous element as at present.—After a few remarks from Professor Hennessey, the CHAIRMAN remarked that he, in common with Sedgwick, Buckland, Professor Forbes, and a host of other geologists, were not of the school of the present day. They believed implicitly, from observations of large parts of the globe, that the intensity of causation in former times was infinitely greater than that which now prevailed. (Hear, hear.) "Catastrophes," as they were termed by the geologists of the old school, were then referred to by the Chairman, who said that in the Alps he had seen a mountain which had evidently been completely overturned. In the words of Mr. Harcourt, "the nature, force, and progress of the past condition of the earth could not be measured by its existing condition."—The discussion then terminated, Mr. Thomson receiving a vote of thanks.

DEPOSITION OF METALS BY ELECTRICITY.—Mr. J. P. GASSIOT, F.R.S., read a paper "On the Deposit of the Metal which takes place from the Negative Terminal of an Induction Coil during the Electric Discharge in Vacuo." He said that when the electrical discharges by an induction coil were made from platinum wires, hermetically sealed in a vacuum tube, as usually constructed, the wire which was attached to the negative terminal of the coil shortly assumed the appearance of being corroded. This arose from very minute particles of the metal having been disintegrated and separated from the wire, which particles were deposited on the sides of the tube, in a lateral direction. If the wires were protected within the vacuum, by being covered with glass tubing extending about an eighth of an inch beyond the wire, it was the inside of the tubing that became coated with metal; but exclusive of this lateral action, a portion of the regular discharge would be observed to obtrude from the glass tubing in the form of a luminous brush. This luminosity was very sensibly affected by a magnet, and could in this manner be made to impinge on different parts of the vacuum tube; and wherever it was thus impinged heat was always evolved This phenomenon of the deflection of the negative discharge was described in a paper communicated by him to the Royal Society, and as he was subsequently desirous to examine with greater accuracy the nature of the deposit thus obtained from the negative terminal, and particularly if it could be obtained in the same manner from other metals than platinum, he had an apparatus constructed in which the discharge could be in slips of glass. The apparatus was also so constructed that wires of different metals could be inserted, and in this manner he succeeded in obtaining deposits of the following metals—gold, silver, copper, platinum, zinc, iron, tin, lead, brass, magnesium, tellurium, bismuth, cadmium, and antimony. For many of these he was indebted to Mr. Matheson. With gold, silver, platinum, tin, and bismuth, the deposit would take place in the state as then exhibited after about 24 hours' action. If the discharges were continued the deposit became denser, and the centre was crystalline. With reflected light a large surface exhibited the lustre of the metal; with transmitted light the outer portion was transparent, showing the peculiar colour of the metals, as gold, green; silver, bluish purple; platinum and tin, blackish grey. Tellurium, with the exception of antimony, he found disintegrated more freely than the other metals, while iron and magnesium were the most difficult, the deposit of the latter being scarcely perceptible. With aluminium wires he could not obtain any deposit after 48 hours' constant action. On one occasion he observed a faint trace on the glass, but on repeating the experiment with another wire no sign of any deposit could be obtained. Under the microscope the larger deposit of metal was not resolved into any form, but appeared as a mere film on the surface of the glass. From a brass wire terminal there was not any separation of the original metals. He had a tube constructed with two wires, both protected by glass tubing. A long slip of glass was inserted, so that the discharges from the positive and negative terminals of the coil could be made with protected wires under the same conditions. The wires were of gold. The usual deposit took place at the negative, but after 24 hours' constant action not the slightest indication of any deposit from the positive wire could be observed. With antimony a very peculiar effect was obtained. Instead of the metal being deposited in a circular form, it spread nearly all over the glass, and on the sides of the vacuum tube. He repeated the experiment by inserting slips of glass of sufficient length as to reach beyond the terminals. Two of those glasses were on the table, and if examined it would be seen that the positive discharge had apparently repelled the deposit as it formed from the negative wire, leaving a space somewhat analogous to the dark band which appeared in the luminous. Whatever might be the cause of the difference in the action of the electrical discharge between the positive and the negative, the disruption of the particles of metal in the latter was merely mechanical. The minute particles were disrupted by the force of the discharge, which, at the negative, met with resistance, and which resistance, under certain conditions, was attended with considerable heating effects, as, if the wires were there, the negative invariably fused whether the discharges were made in air or vacuo. A short discussion followed, and the PRESIDENT, in moving the thanks of the meeting to the author, said the communication was one of the most valuable contributions that had recently been made to physical science.

THE LANCASHIRE COAL FIELD.—To enable the numerous visitors to the Manchester meeting of the British Association, especially the foreign geologists and mineral engineers, to understand the position and extent of the great coal field, on the resources of which the industry of Manchester and the neighbouring towns so much depends, a visit to the best known collieries was early arranged by Mr. E. W. Binney, Mr. Ormerod, and others members of the Manchester Geological Society. Messrs. Andrew Knowles and Sons at once offered their collieries for inspection. Their nearness to Manchester, as well as the superior arrangements of the proprietors for coal-getting at their pits, made this handsome offer very acceptable, and Messrs. Knowles's invitations were extended to all the gentlemen connected with the geological and mechanical sections who were known to take a special interest in the subject. Among the company were M. Escher von Der Linth, the celebrated Alpine geologist and explorer; M. Meriam, the naturalist and director of the Museum at Basle; M. Stöhr, inspector of mines in Prussia; Dr. Joule, F.R.S.; Prof. Salter, of the School of Mines; Profs. Morris, Tennant, and Rupert Jones; Messrs. Dickinson, F.G.S. (the Government Inspector of Mines for this district), P. Higson (Government Inspector for West Lancashire), H. Seeley (Cambridge), Whittaker, Moore, F.G.S., and A. Brady; Revs. R. Hill and T. Wilshire; Messrs. Henry Dawson (Carron Ironworks), C. Becker, Rose, T. and E. Outram, J. Westley; Capt. Woodall, F.G.S.; Mr. David Ricardo; Dr. Petschler; Messrs. E. W. Binney, H. M. Ormerod, H. Ashworth (The Oaks), F. Collingwood, S. Sharp, J. and W. Mellor, J. and R. Hampson, Isaiah Booth, and W. Cooke; Dr. Latham; Messrs. J. M'Clure, Part (Wigan), E. Clarke, J. Hall, R. Lancaster, and the following colliery engineers:—Messrs. J. and W. Lancaster, T. Knowles, E. Bryham, Gilroy, J. Diggles, H. Eaton, Charlton, E. Dorning, Holcroft, J. and W. Stott. At the Pendelbury office the company inspected surface plans of the mines, showing the parts which had been worked, the beds still to work, and the internal arrangements for working. The working arrangements and the machinery at the pit's mouth were then examined, after which the company proceeded, under the direction of a member of the firm, to the Clifton Hall Colliery, distant nearly a mile from the first mentioned. The beautiful machinery at this pit was much admired. As many as possible of the gentlemen descended into this pit (408 yards deep) in the patent cage. The "safety" principle of the cage at this and the other pits consists of four huge iron teeth or clamps, which are connected by a hinge with the upright iron rods at the four corners of the cage. In case of the rope breaking, these iron rods fall, and by this fall the clamps are forced into a horizontal position, their sharp points being forced into the strong wooden beam which goes down to the bottom of the shaft. Those who remained above ground proceeded to the Agecroft Pit (420 yds. deep) situated about a mile nearer Pendleton. The heavy rain which descended greatly interfered with the comfort of the pedestrians. After a hurried survey of the machinery, the company proceeded forward to the Pendleton Colliery (521 yards deep). Those who had not descended the Clifton Hall Pit availed themselves of the opportunity to descend this one; and even some of those who earliest emerged from the Clifton Pit were in time to get a view of this deeper one. As philosophers descended, colliers came to the surface, black and grimy, their work over for the week. They seemed astonished to see so many strangers about. During the day Mr. Binney and other members of the Geological Society fully explained to the distinguished foreigners the extent and direction of the Lancashire coal field, the position, thickness, and character of the various beds, &c. The entire company having returned to the surface proceeded to the workshop, which Messrs. Knowles had elegantly fitted up as a dining hall. The roof was spanned with flags and bannerets, and the walls were decorated in a similar manner. Mr. Jennison, of Belle Vue and the Peel Park refreshment rooms, was the purveyor of the dinner, which was of the most sumptuous description, and comprised everything that could be desired. Mr. Jas. Knowles, of Eagley Bank, presided, and proposed a variety of toasts suitable to the occasion, including the healths of the distinguished foreigners, M. Stöhr and Der Linth acknowledging the same.

GOLD IN NORTH WALES.—Mr. T. A. READWIN read a paper on this subject, in which he confined his observations to an area of about twenty square miles, situate north of the turnpike-road from Dolgelly to Barmouth. Its metalliferous products are chiefly argentiferous galena, copper pyrites, blende, manganese, and mundic, associated frequently with native gold. The position of the quartzose vein in the Clogau Mine, distinguished as the "gold lode," which traverses altered palæozoic slates, near the junction of an eruptive bar of porphyritic greenstone, singularly confirms a remark in Sir R. I. Murchison's "Siluria;" and the same law appears to obtain with respect to all the gold-bearing quartzose veins of the Dolgelly district. There are, in that district, about twenty localities in which gold has been discovered, visible in quartz, or associated more or less with galena, blende, copper pyrites, telluric-bismuth, carbonate of lime, schist, baryta, iron pyrites, &c. By far the richest discoveries are at the Dolfrwynog, Prince of Wales, Cambrian, and Clogau Mines. Mr. Arthur Dean, at the meeting of the British Association in 1844, stated that auriferous veins had existed throughout the Snowdonian range, but experiments made to obtain it then, and ten years later, proved failures. The most interesting and most profitable of all the gold localities at present is the mine in the Clogau Mountains, the St. David's lode being its most remarkable feature. The lode runs nearly east and west, and is almost perpendicular: it is 3 ft. wide, and is composed of quartz, impregnated with sulphides of copper, lead, iron, and occasionally telluric-bismuth, with much native gold, generally in minute particles, but frequently in rich strings or bunches. This lode is at the junction of the Cambrian sandstones and the lingular flags of the lower Silurian rocks. Many years ago it was worked, and the produce, which was called "poor copper ore," was sold to Flintshire smelters, who asked for more at an advance of 5s. per ton. In 1854, the grass-grown refuse of this "poor copper ore" was examined, and in one instance 100 lbs. weight yielded 14¼ ozs. of gold. Difficulties connected with amalgamating machines, and the proceedings of two Chancery suits, prevented the value of this lode being proved until very recently. Thirteen experiments were made by the author, about twelve months ago, on 1 cwt. of the auriferous quartz from this lode; the total result being 25 ozs. 16 dwts. 7 grs. of amalgam, and 8 ozs. 5 dwts. 19 grs. of fine gold. The active working results at the mine during the present year have been 1314 ozs. of fine gold from 207 tons 8 cwts. of quartz from the bulk of the lode. Adding to this 56 ozs. the result of experiments upon 5 tons in 1860, there was a total of 1370 ozs. of gold from 212 tons of auriferous mineral, or at the rate of 6¼ ozs. to the ton. This, the author believes, is the first public record of 1 cwt. of gold, of the value of 5300*l.*, having been obtained from the Crown lands of this country. The royalty is 1-12th; the cost of extraction has been very inconsiderable; and there is a probability of a yield of gold at the present rate for some time to come. For seven years the author has worked at a settlement of this vexed question; many at first doubted, and many more derided, the statement that gold exists, and can be profitable extracted, in the Dolgelly district; but results have proved that he was right. In conclusion, the author gave a list of the gold localities in the district; and a statement as to the association in which the metal is found at each.

Mr. JUKES said he was sure they were all much obliged to Mr. Readwin for his very clear and lucid statement relative to the gold in North Wales. They had long known of its existence, but not that it existed in sufficient quantities to render its production remunerative.—Prof. SMITH, of Sydney, Australia, asked Mr. Readwin by what process he separated the gold from the quartz?—Mr. READWIN: Chiefly by amalgamation, taking care not to intrude any mineral that would have the effect of neutralising the mercury, as galena or copper pyrites, &c.—Prof. SMITH enquired whether some of the mercury was not lost in the process?—Mr. READWIN stated that some of the mercury was always lost; it became so finely divided that some of it was sure to be carried away.

Mr. SMITH said he perceived that in Old North Wales they were falling into the same difficulty as their friends in New South Wales. There were many things which would have a singular action upon mercury, and likely to injure its effect on the gold. The action they had was a chemical one, and, therefore, the gold producers of New South Wales had depended, to a great extent, upon mechanical action exclusively, and generally they had been very successful. If anyone could point out any means by which gold could be satisfactorily separated from the quartz it would be a great boon. The mechanical means they employed in New South Wales would leave only half an ounce per ton, which was considered very fair. The production of gold in Old North Wales, as detailed by Mr. Readwin, surprised him very much. The yield of gold in Victoria or New South Wales did not exceed one ounce per ton of quartz, and in many instances half an ounce was considered a fair yield. The digger of Australia would be extremely pround to get it in such quantities as 6 ozs. per ton, as Mr. Readwin had stated the yield of the Dolgelly quartz to be. From 3 to 4 ozs. per ton would be considered very good anywhere in the gold districts of Australia. In some small localities the yield had been as high as 30 ozs., 40 ozs., or even more per ton, but they were exceptional, and did not last long.

In answer to another question, Mr. READWIN said that the actual cost of obtaining the 1300 ozs. of gold was under 300*l.* He did now wish there to be any misunderstanding as to the yield of gold, for taking an average of the whole auriferous district of Dolgelly he did not suppose the yield would be above half an ounce per ton.

Being asked what was the cost per ton of crushing the quartz, Mr. READWIN said that as they worked only by water-power, the cost of crushing per ton would be less than half-a-crown.—Prof. SMITH expressed his surprise, as the cost per ton in Australia was calculated on an average at 1*l.* per ton. He referred to the fact that most of the firms there used the Cornish stampers for crushing the quartz, and that it answered its purpose well.—Mr. READWIN did not approve of the stampers, as he had found gold washed away after their use.

The proceedings of the Association were brought to a conclusion by a series of excursions, one of which was to the copper mine at Alderley. A great part of this mine has been worked as an open quarry, but is now worked as an immense tunnel or cavern, the entrance to which is by a gentle incline. The cavern is perfectly dry and clean, and it was announced that during the visit it would be well lighted. The lode or deposit of copper ore in the sandstone is about 40 to 60 feet wide, and comes up to the surface in several places. There are also large deposits of lead ores running parallel with the copper. All the chemical operations for extracting the copper from the sandstone are in the open air, and are on an immense scale, unlike any other works in the world. The copper ores themselves are very singular, the ore is chiefly arseniate of copper, and is extracted by hydrochloric acid and re-precipitated by scrap-iron. Another excursion was to the Great Marston Salt Mine, the largest and most remarkable of the rock-salt mines of the Cheshire basin. The deposit occupies a limited space in the Triassic series, exists in more than one bed, alternating with coloured marls and gypsum; the structure of the salt masses is largely prismatic, the prism being vertical. The salt is unequally mixed with marl, some part being quite clean. At Northwich the rock-salt bed that is worked is of considerable thickness, and is overlaid by a bed of salt of a less pure nature. Several beds of salt are known to exist below the thick bed, but are too thin to work. In addition to the rock-salt, a very large quantity is procured from the evaporation of the brine which is pumped up from the beds. The salt manufactured in Cheshire amounts to 1,500,000 tons per annum. Another excursion was to Dukinfield, to the Dunkirk Coal Company's Astley Deep Pits. The machinery and plant on the surface of these pits are of the first class, and in depth the pits have no equal in Europe. This visit was celebrated in a manner quite worthy the spirited proprietors. The company were assembled for a subterranean banquet, at which much loyal and public spirit was displayed, and Mr. WYNNE made some very apposite remarks. He said that nothing could have given him greater pleasure than to attend a meeting like the present. He had found, as the result of some considerable experience, that wherever a mine was carried on on scientific principles, there the sacrifice of human life was always decreased. The arrangements in this mine had suggested to him that if his office were ever to be made a sinecure it must be by the advancement of science such as this mine displayed. Therefore there could not have been a more appropriate occasion than the present for returning thanks to the British Association; for since this pit had been opened there had been scarcely any loss of life in it. Mr. Knipe, author of the "Geological Map of the British Isles," said that they were assembled in the deepest mine in the world. The great mine at Monkwearmouth was for a long time considered the deepest. Its depth was 1710 feet, or 285 fathoms. It was, however, surpassed by a mine at Seaham, belonging to the Marchioness of Londonderry, which was 1800 feet deep, or 300 fathoms. But now, when they came there, they might consider themselves in the "royal pit," for its depth was 2280 feet, or 380 fathoms. Geologists were, indeed, deeply indebted to the Dunkirk Coal Company for the magnificent manner in which they had penetrated into the bowels of the earth; for he believed these mines to be not only the deepest but the best in existence. Mr. Wynne proposed "The Under-looker and Colliers of the Dunkirk Company;" and Mr. W. Seddon, under-looker, acknowledged the toast. Perhaps the most interesting of all the excursions was the one to the Worsley coal mines. To strangers these mines are an object of great novelty, the coal-shafts being approached by a vast network of subterranean canals measuring 30 miles, which was the first great work of the Duke of Bridgewater, and led to the construction of what is called the Bridgewater Canal, and subsequently to the construction of the whole network of canal throughout the country. In one of pits into which the excursionists descended they were taken to see some very curious fossil trees and plants in the shale roof of the main driftway.

REPORT FROM NORTHUMBERLAND AND DURHAM.

SEPT. 12.—The Coal Trade continues good on the whole, but quiet. A very fine season for the harvest has been experienced, but the hot season is now over, and consequently the home trade will shortly revive. The Iron Trade continues dull, and the puddlers' strike still continues, with no sign whatever of its coming to a close. The prospect at Consett remains unaltered, and large numbers of workmen are leaving—upwards of 1000 left the works last week, and a larger number are expected to leave during the present week; the prospect, therefore, is dismal enough. There appears to be little hope that a firm will be found to take the whole concern as it stands. The state of the iron trade, and the immense extent of the works, will almost preclude the possibility of this; but should the works unfortunately come to the hammer, it appears still probable that they might be disposed of in separate lots; at any rate, it is thought that the best part of the works might be so disposed of.

In connection with the subject of the improvement of the working miner, we may notice the various means of employing savings for the purpose of providing for old age, infirmity, or accidents. Contrary, we believe, to the general impression of the public on this subject, the miners of this district have always paid great attention to this matter. The mode which has from a remote date found most favour with them has been those societies called Life Boxes; the practice being to make a weekly or monthly payment, in return for which they receive, in case of sickness, weekly payments, and in case of death certain legacies. Nearly all those societies, however, were founded on a wrong basis, and have consequently proved failures. The attempt lately made to establish a provident society for the exclusive benefit of this class it will be remembered failed, and the attempt to introduce the principle of life assurance among them has, we are afraid, had little better success. They are, it must be confessed, exceedingly slow and apathetic in embracing any new scheme which they do not clearly understand. The old Savings Banks have also been of much service to miners and other workmen, but the arrangements connected with them are very inconvenient, and the localities where they are established few and far separated. The establishment of the system of post-office savings banks, which is to come into operation during the present month, we venture to think may prove of immense benefit to all classes of workmen. Numbers of those workmen, it is well known, earn good wages, and after their immediate necessities are provided for the surplus is got rid of in various ways. The public-house, and the various modes of gambling, it must be said get a very large share of their surplus earnings. The vast extent of gambling of late must indeed excite surprise. Large sums are expended on horse races, foot races, boat races, bowling matches, &c. All those systems begin with the plausible and insidious pretence of encouraging manly and athletic exercise. They, however, rapidly sink into gambling transactions, and thus become engines of immense power, that lend their baneful influence in demoralising, in impoverishing, and, in fact, injuring the workmen in every possible way. Those systems tend most seriously to depress and keep down the miner in a helpless condition, as they lower his moral state incalculably, and also impoverish and tend to ruin his pecuniary position and prospects. And all this is done with the shallow pretext of encouraging manly and healthful sports. It is high time that the miner should see the fallacy of all this, and emancipate himself from the thrall of scheming gamblers. If, instead of wasting his spare cash, every young man were to commence to deposit a small sum weekly, or fortnighly, in the savings bank, great benefit to himself, and the community generally, would be the result. Every facility will now be offered for the accomplishment of this, as those Post-office savings banks will be opened in numerous localities, convenient for the purpose, so that it will no longer be necessary to travel a number of miles to the county town, or capital of the district, for the purpose of making deposits. We would call the early attention of the miners to this subject. It will, we have not the slightest doubt, well repay their most attentive consideration.

The Monkwearmouth Colliery Schools were formally opened on Saturday last. They have been erected on a handsome scale and plan, specially for the purpose of affording instruction to the workmen and children connected with this large and flourishing colliery. Mr. Stobart, one of the owners, in a lengthy address, stated the objects sought by the promoters of these schools, and urged the necessity for the children being sent regularly, and their moral and religious training being supplemented by training at home. In adverting to the importance of religion being combined with the education of youth, he stated that while the schools would be conducted on Protestant principles, the children of Roman Catholics would not be compelled to learn anything objectionable to their parents. These schools may well serve as a model, and will go far to effect what we have lately adverted to in this letter as so desirable. The whole of the children in a family, no matter how numerous, can receive an excellent education for 6d. per fortnight, and, in addition to this, there is a free library and reading-room; there is also an evening school, so that the machinery is complete, both for the education of the young and for adults; the whole being presided over and managed by a competent schoolmaster. A very interesting feature of the proceedings was the presentation by the workmen and agents of the colliery of a splendid testimonial, in the shape of an inkstand and claret-jug, valued at fifty-six guineas, to the worthy owner, Mr. Stobart.—Mr. Pratt, one of the officers, presented the testimonial; and, in doing so, very appropriately eulogised the exertions of Mr. Stobart for the education of the miners' children; and remarked, that he remembered the day when such a thing was not heeded, when the education of miners was spoken of in the House of Commons, even by a northern coalowner, as likely to be disastrous to the country, and to require all Her Majesty's forces to keep them in subjection. But all this is changed, and children are now kept at home and trained, instead of being sent to the pits at eight years of age, and kept there for sixteen and eighteen hours per day.

At the meeting of the North of England Institute of Mining Engineers, on Thursday, the only paper read was one by Mr. S. C. Crone, on "Boiler Explosions," with special reference to the late explosion of this kind which occurred at the Seaton Burn Colliery. The paper is a very able one, and after alluding to the various theories that have been propounded to account for those occurrences, he expresses an opinion that there is yet much to learn respecting them. He, however, advocates a system of double riveting instead of the ordinary mode, so as to ensure a much greater degree of strength, and consequently additional safety. The paper of Mr. Boyd, "On the Carboniferous Limestone of Northumberland," was not discussed, owing to his absence.

REPORT FROM NORTH AND SOUTH STAFFORDSHIRE.

SEPT. 12.—The increased activity in the Iron Trade still continues, and numerous sales of pig-iron are reported. Manufacturers appear decidedly more disposed to purchase, and prices are stronger than they were three weeks ago. In the Hardware Trades there is also a slight improvement, and the further advance in the price of tin is an evidence either of an actually increased demand, or at least of an expectation that a change for the better is probable. The strike in North Staffordshire against a reduction in puddlers' wages is nearly at an end, the men having wisely submitted to what was inevitable, and what had been accepted in South Staffordshire for some time back.

Reference was last week made to the very unsatisfactory position of the Wolverhampton School of Art. In North Staffordshire the institutions of a similar character are far more flourishing, and five medallions have been awarded to pupils in the Hanley School of Art for works exhibited this year in the National Exhibition. A pupil of the Stoke School of Art, Mr. R. Elden, who is an artist employed at the Etruria Earthenware Works, of Messrs. Wedgwood, has received a premium of 10*l.*, offered to students and schools of art by the Council of the Art Union, for the best design of a majolica dish. The successful design represents a group consisting of Fame, Religion, Industry, and the Arts, surrounding a portrait of the Queen.

At Coalbrookdale, well known for its beautiful castings, an exhibition of works of art is being held, which has been got up on a splendid scale. A whole room is occupied by a large collection of the magnificent works produced by Messrs. Mason and Elkington, of Birmingham; and the productions of the Coalbrookdale Company, while differing in character as a natural result of the difference of material and purpose for which they are designed, are scarcely inferior to the gold and silver which the former firm display. In porcelain Messrs. Minton, of Stoke, make a splendid show; and the drawings of the pupils of the School of Art at Wenlock form no mean element in this interesting exhibition.

It is satisfactory to know that at Birmingham the School of Art is most prosperous, and that at Stourbridge a similar institution is doing tolerably well; and it is to be hoped that Wolverhampton will not long have the stigma of neglecting so important an element in its future progress.

REPORT FROM YORKSHIRE, DERBYSHIRE, AND LANCASHIRE.

SEPT. 12.—The position and prospects of the Iron Trade are decidedly more encouraging in these counties, though the position of affairs in America is operating very prejudicially upon the manufacturing industries of Lancashire. It is feared that the supplies of cotton will be very short, and as a consequence the manufacturers will only be able to keep open their works about half time. The trade in Yorkshire is more hopeful, as many large orders have been given out this week, principally for the Continent, as well as for home consumption. In Derbyshire, too, this has been apparent this week, and there is little doubt but that the trade for the autumn will be active, if not exceedingly good. The castings for the great Exhibition, which are being executed at Staveley, will be completed within the time specified, and everything about the works is in a state of forwardness. The Coal Trade is improving, and there is a brisk demand for all descriptions of minerals, excepting ironstone, which is less enquired for. The demand for coal for the manufacturing districts of Lancashire is dull, on account of the slackness of trade, but there is a good enquiry for coals for steamers and for export. The fire at the East Gawber Colliery is still going on, and there is no prospect of its being diminished within a reasonable period. The result is, that a large body of men have been thrown out of employment.

Notwithstanding the frequent advance of colliers' wages during the last few years in this district, there are still indications of dissatisfaction in the colliery district of Drighlington, between Bradford and Leeds, and this week the workmen employed by Messrs. J. and W. Harrison, of Wasp Pit, Drighlington, have struck work for advance of wages, to the extent of 4d. per "dozen," or about 6d. per day. Communistic notions and sentiments are said to prevail to a large extent among the miners of the district.

The subscriptions on behalf of the sufferers by the Clay Cross catastrophe continue to be received; the amount from the date of the last advertisement in the *Mining Journal* has exceeded 250*l.*

Attention is just now being directed to a new colliery company—the Chesterfield and Midland Silkstone Colliery Company—the object of which is to develope a property at Sheepbridge. It is estimated that the coal will be reached in four months, that 175,000 tons per annum can be raised, and that over 66 per cent. profit can be realised upon the outlay required.

The sinking operations at North Derbyshire are still going on, and we understand that the late dispute between the contractor and the company will be settled. The Mill Town Company are still continuing their operations to get through the toadstone, but as yet they have very little prospect of success. The boring operations have shown that some time will yet elapse before they will get through the toadstone, which is always a tedious and expensive operation. The plant belonging to the New Midland Company will shortly, it is expected, come under the hammer, as there is little prospect of the mine being further worked. There is little else to notice this week in the Derbyshire mining district. The hopes of the men of the Peak seem to be fixed upon the opening of the new railway, which is to form the means of exit for the minerals, and to afford a cheap facility for bringing coals into the district, which has hitherto been a matter of great expense.

REPORT FROM MONMOUTH AND SOUTH WALES.

NEWPORT, CARDIFF, and SWANSEA, SEPT. 12.—The following extract from the *Daily Leader* gives a very correct description of the mysteries and present state of the Iron Trade in the district:—"For a long time the iron trade has been in a sadly depressed condition. In many works the orders were of the smallest character, and too often were the prices stipulated so low that the rails supplied were of the commonest sort. We were speaking a short time ago on the subject to one who was not only conversant with every detail of iron manufacture, but held himself a first-class position in a large iron-works. 'We have Russians, Frenchmen, and Germans coming to us (said he) well up to the market rates, and shrewd in their knowledge of iron. And even if an ironmaster wishes to palm off an inferior iron, it could not be done. So a contract is taken, and the men have to work it cheap. Say the rail wanted is a new kind and the iron a peculiar compound, then all the experiments are at the cost of the workman, and all the failure tells on his pocket. I admit (said he) merchants are become so Jewish that some ironmasters are compelled in self-defence to cheat them. And this is how it is done. The purchaser sends an agent to remain on the spot, and test the rails, and see that only good sound rails pass. Well, an agent likes beer, and the men take him away at the critical moment; or, if he is above beer, for according to a philosopher all men have their price, why some other means are found. Sometimes the inspector is a gentleman, many of the Russians are officers in the army, and, strange as it may seem, the use of a carriage and pair, the run of the house, or a pass to sporting ground and trout-streams have a wonderful effect in making an inspector a very civil, decent sort of a fellow.' This is a fact, and it duly proves that when men force a market down unnaturally and unreasonably they suffer for it in the end."

The annual general meeting of the South Wales Institute of Engineers was held yesterday (Friday), at the Royal Institution, Swansea. The meeting will be continued to-day, and a full report will appear in the *Mining Journal* of next week. The following papers, read at former meetings, will be discussed:—Mr. Sims's, on the Cornish Engine; and Mr. C. James's, on Underground Machinery. It is also intended to read and discuss the following papers if time will permit:—On Working Thin Seams, by Mr. H. Cossham; on Prof. Zenner's Diagram for showing the Motion of the Slide-Valve, by Mr. R. Schmidt; and on Explosions of Fire-Damp in Coal Mines, by Mr. Mark Fryar, Andersonian University, Glasgow. The council of the Institute express their desire to receive models and drawings for exhibition at their meetings. The members during their stay in Swansea will visit the Hafod Copper Works, Messrs. Evans, Glasson, and Evans's pottery works, Mr. Glasbrook's colliery machinery, and Mr. Moxham's saw-mills. The usual dinner will be provided this evening at the Mackworth Arms Hotel. Mr. William Adams, chief manager of the Ebbw Vale Works, and President of the Institute for the present year, will, it is expected, be present during the two days.

At the Newport Borough Police Court, on Wednesday, James Haddington was charged with stealing a quantity of coal, the property of Messrs. Powell and Son. The prisoner and others were engaged in loading a vessel, and the former placed several lumps of coal in a sack, which he afterwards carried away. The prisoner preferred being dealt with summarily, and he was committed for seven days. John Selway was also charged with having stolen a quantity of coal, the property of the same firm, under nearly similar circumstances. He had been previously convicted, and the magistrate committed him for seven days.

On Monday, a fatal accident occurred at the Sguborwen coal levels. A lad named John James, about 15 years of age, was engaged in his usual avocation when a fall came down, and he was instantly buried underneath. An inquest was held on the body, and a verdict of "Accidental Death" returned.

The strike still continues at Abercarn, and there is no likelihood of its terminating. The men have held several meetings, and they have intimated that some of the under-agents are very objectionable to the colliers. Mr. Brown, however, replied that he would have no interference between him and his agents. Despite the bad feeling which has originated through the strike, there is some good cheering news to report. For a considerable time past Mr. Brown, the contractor under the Ebbw Vale Company, has been carrying on active operations in sinking the company's new pit, which, when opened, will be one of the finest and most extensive collieries in the district. Last Saturday evening Mr. Brown entertained his workmen with a first-class spread, at the Commercial Inn. The principal inhabitants of Abercarn were present on the occasion, and a very pleasant evening was spent. It was stated that the shaft had been already sunk 120 yards, and the probable depth of the pit will be about 300 yards. The operations are going on in a very successful manner, and the present would have been prosperous times for Abercarn had it not been for the strike, which always brings with it a long train of evils.

The Rasslass vein of coal has just been reached at the New Tredegar Colliery, the pro-

perty of Messrs. Powell and Son. Two headings are worked, and the proprietors have commenced sending the coal to Newport for shipment. The colliery will very shortly be in full working order.

NEATH SHIPPING TRADE RETURNS for the month of Aug., 1861:—Number of vessels, 159, of 13,824 tons register. IMPORTS: 5346 tons of iron ore; 2776 tons of copper ore; 418 tons of pig-iron; 114 tons of railway chairs; 413 loads of timber and deals; 156 tons of pitwood; 147 tons of flour; 1820 quarters of oats; 320 firkins of butter, and sundry goods. EXPORTS: 17,386 tons of coal and culm; 1560 tons of bar and railway iron; 175 tons of copper; and 130,000 fire-bricks. The dock is not included in the above account.

COATING FOR TELEGRAPH CABLES.

What kind of knowledge is superior to practical knowledge? A man who has spent a lifetime in the manufacture of an article of commerce—who can boast of all his forefathers' experience, in addition to the care and attention that not only himself but all his contemporaries have brought to bear on the same subject—must, we should imagine, be the fittest person to judge of any innovation or improvement that a very useful coadjutor (Mr. Theory) to all practical knowledge might one day or other present to him. But, no! his very practical ideas would just preclude him, unfortunately, from being the fittest man, for Prejudice would not allow of a perfectly free and unbiassed opinion. But there are so many new inventions daily rising into notice, on which, unfortunately, we sometimes commence to express opinions (as, for instance, ocean telegraphy) whilst they are only in their infancy; to receive ourselves the notions given to us by committees appointed by Government and other learned men, and accept their reports as the *ultima thule* of all that can be said or thought on the subject. There has lately been brought before the public a company for the manufacture of telegraphic work of every description, but more particularly for carrying out the patents of Mr. Rogers; and, from all we can learn, the late report of the Government committee is against the use of hemp, or wires covered with hemp. It is clear Mr. Rogers's invention could never have been brought to their notice, or the following most curious coincidence could never have arisen:—

Mr. Rogers says that a telegraph cable covered with hemp saturated with his composition exerts under water a pressure on the internal core, which perfectly excludes the passage of moisture, and effects as nearly as possible a perfect insulation.

The Government Report says,—"Pressure greatly improves insulation while it is being applied, and this effect is the more perceptible as the substance is a worse insulator."

There is evidently, then, nothing wrong here.

Next, Mr. Rogers's cable is not only sufficiently strong, but may be raised and repaired more quickly and efficiently than any other, at whatever depth. It is perfectly proof against the attacks of marine animals. It will take a far longer time to file through a cable of his invention than an ordinary telegraph cable of the same size; and the file is the only good comparison one can make to abrasion on rocks or a hard bottom. It is of sufficient specific gravity to sink evenly, cannot corrode, and will not elongate.

The Report says,—"THE EXTERNAL PROTECTION: The form of the outer covering must in each case depend on the local circumstances affecting the site in which the cable is to be laid; and in selecting it regard should be had to the fact that it is necessary to provide for the repair of the cable everywhere, except in depths which interpose a limit to the possibility of raising it. It should be such as to protect the internal core against injuries or strains in laying or in raising for repairs, against the attacks of marine animals, and against abrasion upon a hard bottom; and it must be capable of having joints made in it with ease. It should be such as to give the cable sufficient specific gravity to ensure its sinking evenly. The material by which strength is given to the cable should be effectually protected against corrosion, and should be arranged so as to furnish the required strength with the minimum amount of elongation."

The core, says the Commissioners, may be of the best conducting element known, and even then the Report recommends hemp to receive and protect external wires. Now, we are not telegraphists; but we read and get information in many ways, which enables us to sometimes form an opinion, and we cannot refrain from thinking that in affairs where so little practical experience has really been had as in telegraph cables; where so little as yet is comparatively known of the action of the sea or different currents on the laying of cables; where all that is known militates against the use of previously tried external coverings; where theory certainly is in favour of the above-named system, for Mr. Rogers's invention is not, be it understood, a simple insulating medium for copper wire, a mixture of hemp with a substance as an external covering for cables gives it all the qualities desired by the committee who have just reported on this important enquiry.

Now, as to the merits of the cable as a deep-sea cable, the strands are so plaited that in paying out the cable cannot by any possibility "kink," or become entangled through any twists which the nature of the cable might possibly impose on it. But as yet to so few tests has this cable been put, although those few only serve to strengthen the confidence of its supporters in their belief in its correct principle, that we may call it good only in theory; but it is that sort of theory so palpably correct as to induce its being brought before the public in a way in which, we trust, it may be proved for once to exceed all former practice, and astonish those who legislate thereon.

THE ELEMENTS OF PHILOSOPHY.

The study of Nature and Nature's laws is certainly one of the most interesting pursuits in which we can engage, and it cannot be doubted that when properly directed there is no branch of study more profitable. The great object of the student should be to acquire an intimate acquaintance with the principles of the sciences involved as speedily as possible, and every one naturally seeks to accomplish this object in the least tedious manner possible. Although, perhaps, to the few a concise, dry, scientific detail might be acceptable because less reading would be required, by far the greater number would give the preference to a work from which the necessary information can be obtained, although at the expense of a little extra time, with the pleasure that would attach to the perusal of a well-written newspaper article; it was precisely to accommodate this class of readers that the very excellent treatise* by Mr. Jabez Hogg was written, of which an edition of 10,000 has already been disposed of, and which is now presented to the public in a revised and enlarged, yet cheaper, form.

In one of Bohn's well-known five shilling volumes Mr. Hogg has given a complete and satisfactory introduction to the sciences of animal mechanics, pneumatics, hydrostatics, hydraulics, acoustics, optics, caloric, electricity, voltaism, and magnetism—an introduction which will enable the student to comprehend all the great works upon the several subjects with profit to himself and without fear of falling into the error of propounding foolish theories, which can but tend to prevent the development of science rather than aid it. Such fallacious notions as that the moon does not rotate, or that the science of astronomy requires remodelling, will be impossible with those who have carefully studied Mr. Hogg's volume, from the simple fact that they will have learned how to prove truth and detect error. We do not hesitate to say that if such works as that now before us were more generally read by mechanics, and the industrial community generally, we should find fewer wasting their hard-earned gains in patenting and attempting to introduce mechanical impossibilities, although a larger number would probably contribute to the welfare of the industries in which they are engaged.

* "Elements of Experimental and Natural Philosophy." By JABEZ HOGG, F.L.S., M.R.C.S., &c. London: H. G. Bohn, Covent-garden.

"OUR BLACK DIAMONDS."—A highly interesting little volume bearing this title has just been issued (through Mr. John Weale, of Holborn) by Mr. Thomas Plimsoll; its object being to explain in a popular and attractive style the origin, use, and value of coal—an object which he has certainly accomplished to the fullest extent that could have been desired. Mr. Plimsoll carefully and concisely describes what coal is, how it was probably formed, its several varieties, where it is found, and how it is obtained, rendering his narrative complete by affording ample information concerning the history and statistics of the coal trade, and offering some speculations as to how long our coal will last. Mr. Plimsoll's researches have evidently been large, and with the sole exception of the statistical chapter there is little to complain of; with regard to the statistics, however, we can but regret that he has given the coal production of the kingdom for 1857 only, although it has since been discovered that the figures given for that year were an underestimate, and although he could have obtained the corrected statistics for 1860 from the *Mining Journal* more than six weeks ago.

IMPROVED LEDGER INDEX.—Mr. Smith's new Ready Reference Index is gradually coming into use; and from the facilities which it offers to the book-keeper is certainly entitled to extensive patronage. The novelty of the arrangement consists in printing the letters on the left hand side of the page instead of the right, so that whenever the ledger is thrown open the index is exposed to view. We understand that the new index adds nothing to the cost of the book.

NEW OVER-WINDING APPARATUS.—Messrs. Copple, of Eccleston, Lancaster, have invented an inventon to prevent over-winding at coal and other mines.

METALLURGIC WORKS IN CALIFORNIA.—Large metallurgic works are now in full operation in San Francisco, and secure an ample amount of patronage both for the treatment of ore upon a large scale and for experimental purposes. The ore is first treated with crushers and Chilian mills, and afterwards in arrastres—the amalgam being separated from the ore by subsequent washing in vats. The works are capable of reducing over 3 tons per day, and the proprietors of them undertake to return the contents of 20 tons of ore to the owners, in fine ingots, in each week. When necessary double this quantity of ore will be reduced without the addition of new machinery. Sulphides have been successfully treated, and the company either purchase the ores or smelt them for the owners. It is proved by results actually obtained that ore which will not pay to send to Europe leaves a good profit when reduced by these works, which are on the spot.

BAHIA STEAM NAVIGATION COMPANY.—We gave a preliminary notice of this new undertaking last week. It has been so strongly recommended by the leading daily and other journals, and so favourably received by the public, that the very early date of Monday next has been fixed upon by the board of directors as the latest day within which to receive any further applications for shares. This, in fact, is the only company to which practical attention appears to have been given, during the week, at the Stock Exchange, where the quotations have ranged from 1 to ¾ premium.

BRAY'S TRACTION-ENGINE accomplished a very satisfactory performance during the week—one of the largest boilers ever manufactured being easily conveyed from the works of Messrs. Horton and Co., in Southwark, to its destination, the brewery of Messrs. Garrett, Whittaker, and Co., Camden-town. Several foreign gentlemen were present, and witnessed the removal with much interest, with the view of introducing this engine into their respective countries. The expense of the removal was considerably less than half the cost would have been had horses been employed.

THAMES TUNNEL COMPANY.—Receipts for the week ending Sept. 7, 147. 9s. 11d.; number of passengers, 13,079.

HOLLOWAY'S PILLS—PROSTRATION OF STRENGTH.—The old and delicate always feel the sudden transitions from cold to heat, and fearfully they tell upon them unless preventive measures be adopted to counteract them. Nothing effects this object so certainly and so speedily as Holloway's pills, which begin by strengthening the stomach, regulating the liver, and purifying the blood, and end in working a complete, lasting, and rapid cure. These admirable pills exercise a most salutary influence over every organ in the human body. They dispel nervousness, weariness, and enervation. In a word, Holloway's pills wonderfully restore every function to its natural state of health and vigour. They never fail, directly or indirectly; they adjust and invigorate the whole animal economy.

THE SLATE TRADE—ITS INCREASING IMPORTANCE.

A novelty in conducting public undertakings was announced in last week's Journal—that of an agent undertaking to return a dividend during the first year of a company's operations of certainly more than 5 per cent., and guaranteeing the fulfilment of his promise by lodging ample funds with the company's bankers. The company which has taken the initiative in this mode of securing public confidence is the Slate Mountain Company—an undertaking formed under the most favourable auspices, and upon the principle of limited liability, with a capital of 30,000*l.*, in shares of 5*l.* each, for working an extensive and highly-promising slate property in the Croeser Bach district. That a slate company should be enabled to secure a manager bold enough to give such a guarantee is the more remarkable, inasmuch as although the profits derivable from slate quarrying are known to be large, it is a common saying amongst quarrymen "that no quarry can pay for the first three years." Competent authorities upon the question of slate predict that the Croeser Bach will prove of equal or even greater value than the celebrated Festiniog district, and certainly with a guaranteed dividend for the first year there is every inducement for capitalists to assist in its development. The Croeser Bach property has been inspected, and favourably reported upon, by Messrs. William Jones (slate merchants, City-road), Silas Evans, Wm. Owen, and William Griffiths, the latter of whom reports that a dozen slate quarries might be advantageously and profitably opened in the many seams which intersect the property. More recently Mr. Etheridge, one of the gentlemen engaged upon the Government Geological Survey, has visited the quarry, and his report exceeds in its favourable character all that has preceded it. He states that "The extensive area, 100 acres, comprised in the sett, the advantageous position, and, as far as can be determined, good quality of the slate and thickness of the veins, must render it ere long a marked feature in Welsh slate mining, for I know of no other property so advantageously situated, or one commanding such facilities for slate mining in the district, and especially on the completion of the line of railway from Port Madoc to the foot of the works on the Cynicht, in the Cwm Croeser, and which is to be immediately commenced." After describing the geological position and character of the slate veins, he continues that "It is sufficient that there are all the necessary elements of success and prospects of large and important slate quarries being successfully worked on the slate mountain upon the fine veins running through; indeed, constituting the Slate Mountain sett." With regard to the security afforded to those embarking in the Slate Mountain Company (the prospectus of which appears in another column), it may be added that the directors bind themselves to return the whole of the deposit money unless at least one-half of the shares be subscribed for.

MINING NOTABILIA.

[EXTRACTS FROM OUR CORRESPONDENCE.]

NORTH DOWNS has lately paid a dividend of 2s. 6d. per share, which was rather premature, as they had to discount their ore bills to do so. The meetings in this mine are held four-monthly, so that there will be only three dividends in a year. They have a good bunch of ore from the 40 to the 50, and the future success of the mine depends greatly upon their getting a good run of ore ground in the 60. The great evil in the working of many mines is taking away the ore too fast. As an instance, we may mention West Caradon; and the shareholders in North Downs will do well, if they wish to make it a lasting property, to insist upon their agents keeping proper reserves.

PENHALDARVA.—The new lode cut last week is considered a very kindly one, the whole of it being lead, blende, and mundic, with a very beautiful light blue killas.

GREAT WHEAL MARTHA.—It is proposed to increase the capital from 12,500 to 20,000 shares. The prospects of success are good, but unless immediate action is taken, it is feared that a promising mine might be sacrificed. Shareholders ought at once to see to their interests. Great Wheal Martha is a good speculation, and the mine, by further outlay, may in course of time be made to pay; but to talk of dividends before the mine is laid open is simply absurd, and must end in disappointment to all concerned. Capt. Richards has inspected the mine during the past week, and reports most favourably upon it.

At BRONFLOYD they have a very important discovery by the shallow intersection of another new lode; it is south of the great rise, and has been discovered by a cross-cut therefrom. It may prove most valuable to the future workings, as the same lode can be intersected by equally short cross-cuts from the deeper workings down to the 40.

CLARA UNITED MINES.—A great change is manifest here from the active operations now going on. In the east end of the 32 there is a good lode, yielding capital lead ore, and also in the winze sinking on the dip of the lode from the 20 to this level. They have only about 6 fathoms further to open, and this will be done quickly, as the men are rising up from below to meet the winze. When communicated the company are led to expect regular samplings of ore, as the ground is whole from one level to the other, and will be stoped cheaply. If the value of lead should advance these shares would be easily sought for.

GREAT ALFRED.—We understand that the Cornish shareholders say the mine shall not stop, and that those who choose may relinquish. Many economical improvements may be made, and no doubt will be effected if, as is proposed, the management be transferred to Cornwall.

EAST DAMSEL.—The cross-cut here will intersect the main lode, it is believed, in less than two months from this time.

TRIMLEY HALL (near Minera).—This mine has been worked for some time passed by a private company, and until very recently unsuccessfully. During the last few months, however, under the management of Mr. T. P. Thomas, several important discoveries have been made, and a good course of lead laid open. The position of the mine is the best in the locality, and the general opinion is that it will be another prize in this rich district.—C. T.

EAST PROVIDENCE adjoins Providence on the east; the workings are, we believe, very near each other, and the prospects are considered undoubtedly very good. Returns have just begun to be made, the first sale being last week, 52*l.* 15s.—H. C.: *Manchester.*

NEW WHEAL FRANCES is opening out well for a young mine. The engine-shaft is sunk 5 fms. below the 10 fm. level through a good course of tin, and still holding good. A winze has been commenced 10 fms. further east, and only sunk 3 feet below the level, also come into a good course of tin, thus showing that the length of tin ground must be considerably increasing as they go down. This mine at present looks promising to be one of the greatest prizes in the Camborne district for a long time; it is already meeting costs, and with another level opened (which will be in the course of two months) small regular dividends may fully be expected. Sinking will also be commenced on the Garden lode in a fortnight, when they will be raising some good copper ore; the lode here is 3 ft. wide, the leader part 1 ft. wide, and makes a produce of 7⅛ per cent. of fine copper. A shaft has been sunk 7 fms. on this lode, or so far as we could go for water. A flat-rod will now be attached to the engine to pump the water from this lode. Another parcel of tin will be ready for the smelting-house in the course of two or three weeks.

POLHIGEY MOOR MINE.—The workings are progressing satisfactorily. The cross-cut is being driven in Treffrey's shaft at 12*l.* 12s. per fm. The ground in the east shaft is getting stiff; the ground in the south shaft is sinking at 4*l.* per fm., with some very good stones of tin in the branch; in this shaft the branch is 9 in. big, and the agent broke therefrom on Wednesday a stone the size of a man's shoe, worth about 1000 lbs. of tin per 100 sacks.

NORTH TRESKERBY.—The sampling here on the 11th instant was 356 tons of improved quality copper ores, and there are now on the floors ready for the next sampling full 60 tons of adventurers' ore. The mine continues to look well, and the shares are eagerly sought after by local parties.

WEST WENDRON is one of the most favourably situated mines in Cornwall. The adjoining mine, Wendron Consols, is a great success and a profitable mine, and all the lodes of Wendron Consols run through West Wendron. A new steam pumping-engine has been erected, and a very great outlay gone to. Several important points are to come off.

BRYN GWIOG.—The lode in the shaft is worth 4 tons per fathom. The leader of solid lead is fully 1 ft. wide; this is very important, and likely to change the character of the company, from a prospect of calls to a certainty of dividends.

DING DONG.—The accounts ending June contrasted favourably with the previous quarter, having sold 33 tons 10 cwts. of tin, against 13 tons 19 cwts. for March. The rich dicovery continues to open up well, and at the next audit in December for the quarter ending September, the tin for July, August, and September will show a balance in favour of the adventurers, and dividends will be resumed in March, 1862. Thirty men are breaking tin at 6s. in 1*l.*, at 40*l.* per ton tribute; this is in the 60, and in whole ground to surface; there are also several interesting points coming off in the old mine.

WENTNOR MINING COMPANY.—The property worked by this company, which has just been inspected by Messrs. Phillips and Darlington, is situated within a short distance of Holywell; it is of considerable extent, and in the immediate proximity of several mines which have yielded very large quantities of lead ore. In the western portion of the grant the mountain limestone appears at the surface, but southwards this rock is, to a limited extent, capped with shale; in this respect it is similar to mines situated in other parts of the mineral field. Hitherto workings have been chiefly confined to the Milwr or Pantasa lode, and hence the other veins have been but little explored. They recommend that, even in the event of an early discovery, the workings should be continued in a systematic and miner-like manner, and that there should be no premature exhaustion.

TREFFRY CONSOLS.—This mine is situate in Lower St. Columb, directly north, and about two miles distant from the once-celebrated East Wheal Rose, the lodes of which run directly through this sett, which is fully one mile long by 600 fms. wide. The north and south lodes have scarcely been sufficiently opened upon for an opinion to be given, but they appear to be large champion lodes, with good gossan backs. My attention, however, was particularly called to an east and west lode, which is laid open on the back, about 40 fathoms in length, by pits from 4 to 6 feet deep. The lode underlies south about 2 ft. in a fathom, and is composed of gossan, friable spar, mundic, and lead, of the latter a sufficient quantity to pay well for dressing. The horse-engine recently erected works well, and will carry the mine to the depth of 20 fathoms. There are ample grounds for anticipating large and lasting profits.

ST. DAY UNITED.—We have a fine course of tin at the bottom of Billing's, worth 70*l.* per fathom, and the ends driving east and west under this course of tin were being driven 2 fathoms in each end. It has just been reported they are raising more than 1 ton per day from this level.

YARNER.—This mine is steadily improving, the western part of the workings are opening up quite new discoveries. The 30 west especially is worth at least 20*l.* per fm.; the lode, which carries a defined wall, is letting out water freely. The agents are unanimous in their opinion that when deeper levels are brought on permanent profits will be made.

Government School of Mines, Jermyn Street.

GOVERNMENT SCHOOL OF MINES, JERMYN STREET, LONDON.
DIRECTOR—Sir RODERICK I. MURCHISON, D.C.L., &c.
The prospectus for the Session, commencing on the 7th October next, will be sent on application to the Registrar. The Courses of Instruction embrace Chemistry, by Dr. Hofmann; Physics, by Prof. Tyndall; Natural History, by Prof. Huxley; Geology, by Prof. Ramsay; Mineralogy and Mining, by Mr. Warington Smyth; Metallurgy, by Dr. Percy; and Applied Mechanics, by Prof. Willis. TRENHAM REEKS, Registrar.

MINERALOGY—KING'S COLLEGE, LONDON.—PROF. TENNANT, F.G.S., will COMMENCE a COURSE of LECTURES on MINERALOGY, with a view to FACILITATE the STUDY of GEOLOGY and of the APPLICATION of MINERAL SUBSTANCES in the ARTS. The lectures will begin on Friday morning, October 4th, at Nine o'clock. They will be continued on each succeeding Wednesday and Friday at the same hour. Fee, £2 2s.
R. W. JELF, D.D., Principal.

TO CAPITALISTS IN CONNECTION WITH THE COAL AND IRON TRADES.—WANTED, by an IRON an COALMASTER, a PARTNER or PARTNERS, who can furnish about £10,000 by instalments, and keep £5000 to be further brought in, if required, within a period of two or three years, making together £15,000, for a MOIETY of a PIG IRONWORK and EXTENSIVE COAL WORKS in WALES, which are capable of an immediate return, and with a little further outlay (part of the capital now required) will make a profit exceeding £20,000 per annum fixed, certain, and free from risks. The property is a most eligible one, on the South Wales Railway, near the best Welsh ports, within an 8s. rate of London, and where forge pig and foundry pig of the best quality, as well as tin-plate pig-iron, can be made at an average cost of 35s. per ton, and coal put in the railway wagons on the rail at 3s. per ton, with most extensive markets open. The property is extensive, and contains abundance of the best coal, house, steam, iron making, and coking, as well as black band, claystone, and hematite ore, of which there is a fine field, known as the Llantrissant Mine. The railway passes through the property.—Apply to "E. D.," *Mining Journal* office, 26, Fleet-street, London, E.C.

TO CAPITALISTS.—WANTED, a PARTNER who can invest a few hundred pounds to WORK a COLLIERY situate in the FOREST OF DEAN, GLOUCESTERSHIRE, already thoroughly opened on four of the best seams of red ash coal in the district. The colliery has been producing coal for some time, which has hitherto been shipped at Lydney Basin, and a satisfactory market has been secured for it. With a small additional outlay a vend of at least 70 to 80 tons of coal daily may be obtained.—For further particulars and to treat, apply to "Y. Z.," Post-office, Lydney, Gloucestershire.

WANTED, a SECOND HAND HORIZONTAL ENGINE, with Cornish BOILER (about 20 to 30 in. cylinder preferred). Also, a CRUSHER, capable of being driven by a 14 in. cylinder engine.—Apply, with price, to J. HUMBY, 23, Old Jewry, London.

HORIZONTAL STEAM ENGINES FOR SALE, one each of 14, 17, and 20 in. cylinders, 36 in. stroke, quite new. They are especially adapted for mining purposes, and are very substantially made. Also, several of from 6 to 8 horse power.—Apply to Messrs. E. PAGE and Co., Engineers, Laurence Pountney-place, Laurence Pountney-hill, Cannon-street, E.C.

FOR SALE, STEAM ENGINE, CRUSHER, HAULING MACHINE, PUMPS, AND CONNECTIONS.—A first-rate 20 inch cylinder HORIZONTAL CONDENSING STEAM ENGINE, with 7 ton boiler and outfit complete, fly-wheel, 5 ft. stroke. CRUSHER, 24 in. diameter, rolls and connections for same. HAULING and PUMPING MACHINERY, and connections, by Messrs. Nicholls, Williams, and Co. Also, two metal pumps, 8 in. bore, about 34 fms., in 23 joints, with clack seating and rods, and prongs, complete; and a 6 in. bore, 18 fms., also complete. All nearly new, and in good condition.—For particulars, apply to Mr. RICHARD PEARSON, Ennis, Ireland.

BRITISH MINING COMPANIES IN BRAZIL.—At a GENERAL MEETING of the Committee of the BRITISH AND FOREIGN ANTI-SLAVERY SOCIETY, held on Friday, the 6th of September, 1861, the following resolution was unanimously passed, and ordered to be advertised in the public papers:—
RESOLUTION.
The committee having had their attention directed to the formation in London of a new Brazilian Mining company, consider it to be their duty to call attention to the opinion given by the law officers of the Crown, as conveyed to Mr. Consul Monroe, at Surinam, in a despatch from Lord John Russell, dated Jan. 27, 1860, to the effect that "British subjects holding slaves in any foreign country will render themselves liable to criminal prosecution, whenever they shall be found in British jurisdiction;" and that "it is the determination of Her Majesty's Government to enforce the statutes"—viz., the 5th George IV., c. 113, and the 6th and 7th Vic., cap. 98, which absolutely prohibit British subjects from dealing in or from holding slaves under any circumstances whatsoever.
The committee would, therefore, urgently entreat those persons who are likely to take shares, or to become directors, in the said new Brazilian Mining Company to carefully guard themselves against engaging in any transaction which may involve them in slave-dealing or slaveholding, in violation alike of British law and of the principles of humanity and religion. L. A. CHAMEROVZOW, Sec.
No. 27, New Broad-street, E.C.

RIBDEN MINING COMPANY (LIMITED).—Notice is hereby given, that an EXTRAORDINARY GENERAL MEETING of the shareholders in this company will be HELD at the White Hart Hotel, Uttoxeter, on WEDNESDAY, the 25th day of September inst., to confirm the resolutions passed at the extraordinary general meeting, held at Derby, on the 27th day of August last.
By order of the Board, JNO. B. REYNOLDS, Sec.
1, Winchester House, Old Broad-street, London, E.C., Sept. 12, 1861.

BAHIA STEAM NAVIGATION COMPANY (LIMITED).—NO APPLICATION FOR SHARES in this company can be RECEIVED after MONDAY, the 16th inst. By order of the Board, H. F. WILSON, Sec.
Offices of the Bahia Steam Navigation Company (Limited),
36, Cannon-street, E.C., Sept. 11, 1861.

THE GENERAL TELEGRAPHIC WORKS COMPANY (LIMITED)—ROGERS'S PATENT.
Incorporated under the Joint-Stock Companies Act of 1856 and 1857, whereby the liability of the shareholders is limited to the amount subscribed.
Capital £50,000, in 10,000 shares of £5 each, with power to increase.
Deposit on application 10s. per share; and on allotment 10s. per share.
No call to exceed £2, nor any calls to be made at intervals of less than three months, of which due notice will be given.
TRUSTEES.
The Lord GEORGE HILL.
ROWLAND RONALD, Esq. (Director of the National Bank).
DIRECTORS.
The Hon. F. HENRY BERKELEY, M.P. (Bristol), Victoria-square, Pimlico, S.W. (Chairman).
ALEXANDER CHARLES BRICE, Esq., St. Mary Axe.
Col. GEORGE M. GUMM, Beaumont-place, Portland-square.
The Lord GEORGE HILL, Ballyare, Ramelton, Ireland.
HENRY HART, Esq., Great Winchester-street, City.
C. M. KERNOT, Esq., M.D., LL.D., Gloucester House, West Cowes.
General T. E. M. MASON, Brompton.
A. MELHADO, Esq., Prince's-square, Kensington-gardens.
RICHARD CHARLES WEBB, Esq., Wimbledon, and Beechwoods, Oxon.
BANKERS—The National Bank, Old Broad-street, London.
SOLICITORS—Messrs. Jenkinson, Sweeting, and Jenkinson, Clement's-lane, London.
GENERAL MANAGER—Lemuel Brockelbank, Esq.
ENGINEER—Joseph Rogers, Esq. (Electrical Engineer).
AUDITORS—Messrs. Goodchap, Tyler, and Co., Official Auditors, Gresham-street.
SECRETARY—James Henson, Esq.
OFFICES,—215 and 216, GRESHAM HOUSE, OLD BROAD STREET, LONDON.
The electric telegraph is destined to become a network of communication over the whole globe; while, as yet, the field of its operations has scarcely been entered upon. Immense profits have already been realised out of the limited works that have been executed; and, considering the great saving effected by Mr. Rogers's method of constructing cables, the directors are justified in anticipating a highly profitable result to the operations of the company, which has been formed for the purpose of not only carrying out his inventions, but of undertaking the preparation of all materials required for telegraphic communication, the manufacturing and laying down cables upon any principle that may be required by any companies, and to undertake executing contracts for, or maintaining, every kind of works connected with telegraphy.
The directors have entered into a preliminary arrangement for purchasing the patent rights of Mr. Joseph Rogers, "For Improvements in the Manufacture of Electric Cables, and any other of his future inventions connected with telegraphy;" the payment for these rights to consists in paid-up shares in the company, which shares not to receive a dividend until the shareholders of the subscribed capital shall receive a dividend of 4 per cent.
A contract for 150 miles of cable is on hand; and a cable is ready for connecting Liverpool and Birkenhead.
Applications for shares may be made to the bankers, or solicitors, at the offices of the company, addressed to the secretary, of whom the prospectus in full, testimonials, and every information may be obtained. Specimens of the cable may be seen at the company's offices, 215 and 216, Gresham House, Old Broad-street.

HALL AND WELLS, PATENTEES AND MANUFACTURERS OF SUBMARINE TELEGRAPH CORES, CABLES, &c.—TELEGRAPH CONDUCTORS INSULATED with INDIA RUBBER at £5 per mile and upwards. CORES WARRANTED to STAND the USUAL TEST for INSULATION. Further particulars as to price of cores, cables, &c., can be had on application at 60, Aldermanbury, City, E.C.; and Steam Mills, Mansfield-street, Borough-road, Southwark, S.E.
Copper wire covered with silk, cotton, or any other material, to order.

PATENT LEVER BREAK, FOR RAILWAY WAGONS, doing away with the objectionable break rack. Can be APPLIED to EXISTING STOCK at a TRIFLING EXPENSE. Royalty moderate. Models can be seen at 34, Great George-street, Westminster; and the breaks in action at the works of the Railway Carriage Company; at the Peterboro' Station, on the Eastern Counties Railway; the Rugby Station, London and North-Western Railway; the Cardiff Docks Station, Taff Vale Railway; and at the Works, Oldbury, near Birmingham, where all communications are requested to be sent.

ASSAY OFFICE AND LABORATORIES.—MESSRS. MITCHELL AND RICKARD beg respectfully to inform their friends that they have REMOVED from Dunning's-alley to No. 29, GREAT ST. HELEN'S, BISHOPSGATE STREET WITHIN, where the business will be conducted as usual, in all classes of mineralogical, agricultural, and commercial assays and analyses, at moderate fees.
Special instruction to gentlemen desirous of acquainting themselves with expeditious methods of ascertaining the value of ores, manures, manufactured and colonial products, &c., without having recourse to professional assistance.

THE SLATE MOUNTAIN COMPANY (LIMITED).

NOTICE OF DIVIDEND.

The Directors of the above company hereby give notice that they have concluded an arrangement with a thoroughly responsible party to undertake the management of the company's operations in Wales; and have, at the same time, to inform the public that the MANAGER has undertaken to GUARANTEE to all shareholders in the company a DIVIDEND for the FIRST YEAR, and has lodged with the company's bankers an amount of cash more than sufficient to cover his guarantee.

4, Lothbury, E.C. By order, A. MAYOR, Secretary.

THE SLATE MOUNTAIN COMPANY (LIMITED).

Capital £30,000, in 6000 shares of £5 each.

Deposit, £1 per share; and £1 upon allotment.

Registered pursuant to the Joint-Stock Companies Acts, limiting the liability of each shareholder to the amount of their subscriptions.

CHAIRMAN—Major-General MASON, Brompton.

DIRECTORS.

ALEXANDER CURRIE, Esq., Teignbridge, Newton Abbott.
JOSHUA FINNER, Esq., South American Chambers, Cecil-street, Strand.
Lord GORDON, Hampton, Surrey.
Colonel GEORGE M. GUMM, Beaumont-street, Portland-place.
JOSEPH HOPGOOD, Esq., Addison-road, Kensington, W.
Capt. JORDAN, Chertsey, Surrey.
EDWARD FREDK. LEEKS, Esq., F.L.S., 2, Walbrook, E.C.
JOHN WALKER, Esq., Kenilworth House, Cheltenham.

BANKERS—Bank of London, Threadneedle-street.

BROKERS—Messrs. Ross, Lainson, and Bedford, 4, Lothbury.
Henry Flint, Esq., Park-row, Leeds.
James Case, Esq., Liverpool.
H. W. Poutney, Esq., 5, Royal Exchange, Manchester.
Messrs. Stephens and Son, 44, Dame-street, Dublin.
Messrs. Adamson and Horne, 45, Marischal-street, Aberdeen.
Messrs. R. Massey and Son, Birmingham.
Messrs. T. and A. Fox, 51, Dame-street, Dublin.
Messrs. Orr and Co., Belfast.

SECRETARY (pro tem.)—Mr. Mayor.

OFFICES,—4, LOTHBURY, LONDON, E.C.

This company has been formed for the purpose of purchasing an unusually long lease or grant, to work certain veins of slate rock extending under about 100 acres, situated on the north-east side of a farm called Croeser Bach, in the parish of Llanfrothen, in the county of Merionethshire, and believed by competent judges to be the richest known slate deposit in all Wales.

With a working capital of £10,000 it is estimated that 7000 tons of slates can be made annually, which would realise a profit of about 48 per cent. per annum.

Mr. Robt. Hunt, F.R.S., Compiler of Mining Records for the Government, has recently made a calculation as to the average of the profits from the workings of slate quarries in Wales; he gives them at upwards of 50 per cent., and some of the large quarries, it is confidently affirmed, realise as much as 100 per cent.

To ensure subscribers from any loss, which often arises when a sufficient number of shares are not subscribed for, the directors bind themselves to return the whole of the deposit money, unless at least one-half of the shares be taken.

Applications for shares, with a deposit of £1 per share, can be sent to the bankers, brokers, or to the secretary, at the company's offices.

Samples of the slate rock from the quarry can be seen at the offices, 4, Lothbury.

Full prospectus, with reports upon the quarry by one of the Government Geological Surveyors; Mr. Jones, the slate merchant in the City-road; Mr. William Griffiths, the manager of the Moelwyn Quarries; Capt. Silas Evans, of Ovoca, manager of the Carysfort Mines; and other practical and experienced authorities, together with forms of application for shares, can be obtained from the secretary, at the company's offices, 4, Lothbury, or from any of the brokers.

THE SLATE MOUNTAIN COMPANY (LIMITED).—

Notice is hereby given that, owing to the numerous applications for shares already sent in, the Directors will meet to consider the same and MAKE the REQUISITE ALLOTMENTS on FRIDAY, the 27th of September.

Offices, 4, Lothbury. By order, A. MAYOR, Secretary.

THE SLATE MOUNTAIN COMPANY (LIMITED).—

ALL APPLICATIONS FOR SHARES in this company MUST BE SENT in to the Brokers or Secretary ON OR BEFORE THURSDAY, the 26th of September.

By order, A. MAYOR, Secretary.

THE CENTRAL SNAILBEACH MINING COMPANY (LIMITED).

Capital £10,000, in 10,000 shares of £1 each.

Deposit, 2s. 6d. per share, payable at Messrs. Rocke and Co.'s, bankers, Shrewsbury, upon application, which will be returned if no allotment be made to the applicant.

Projected to work most valuable veins of lead ore under Hogstow Hall Farm, in extent 295 acres, actually adjoining the western boundary of the renowned Snailbeach Lead Mine, two miles from Minsterly Railway station, Shropshire.

For detailed prospectus, see *Mining Journal* of July 27, p. 470, and of 3d Aug., p. 502; and for a copy of Messrs. Phillips and Darlington's report, since which the Strong vein in this sett has been identified by Messrs. John Evans and David Davies, two of the present resident Snailbeach agents, as none other than the main lode of their celebrated mine, see *Mining Journal* of 24th August.

The promoters desire the strictest investigation.

Prospectuses, copies of the reports, &c., can be had from Messrs. PHILLIPS and DARLINGTON, 26, Gresham-street, London, who will afford every information; or from the undersigned, to whom all applications for the remaining shares are to be promptly made.

SAM. HARLEY KOUGH,
Shrewsbury and Church Stretton, Solicitor to the Promoters.

DODDS' IRON AND STEEL PATENT LICENSING COMPANY (LIMITED).

This company is PREPARED to GRANT LICENSES on moderate terms for the USE of their PATENT for STEELING RAILS, POINTS, CROSSINGS, MACHINERY, and EVERY DESCRIPTION of IRONWORK.

The process, which is exceedingly reasonable in cost, and gives the most extraordinary durability to the material, has been highly approved of by the following gentlemen, firms, and companies, several of whom have extensively adopted the valuable improvement:—

ROBERT STEPHENSON, Esq.
JOHN BOURNE, Esq.
J. PERRING, Esq.
THOS. E. HARRISON, Esq.
THE GREAT INDIAN PENINSULA RAILWAY COMPANY.
THE NORTH-EASTERN RAILWAY COMPANY.
Messrs. STEPHENSON AND CO.
THE EAST LANCASHIRE RAILWAY COMPANY.
THE GREAT NORTHERN RAILWAY COMPANY.
THE MIDLAND RAILWAY COMPANY.
THE METROPOLITAN RAILWAY COMPANY have ordered a large quantity of rails by this process.

The FOLLOWING FIRMS are PREPARED to EXECUTE ORDERS under the company's patent:—

Messrs. S. BEALE AND CO., PARK GATE, ROTHERHAM.
Messrs. DODDS AND SON, ROTHERHAM.
Messrs. LOSH, WILSON, AND BELL, NEWCASTLE-ON-TYNE.
THE EBBW VALE COMPANY, SOUTH WALES.
Messrs. LEVICK AND SIMPSON, NEWPORT, MONMOUTHSHIRE.
Messrs. LLOYD, FOSTERS, AND CO., WEDNESBURY.
THE ISCA FOUNDRY COMPANY, NEWPORT, MONMOUTHSHIRE.

Applications for Licenses can be made to R. COOKE, Esq., at the company's offices, No. 7, Size-lane, London, E.C., where also testimonials and other information may be obtained.

NICKEL AND COBALT REFINING, AND GERMAN SILVER WORKS, 16, OOZELL STREET NORTH, BIRMINGHAM.

STEPHEN BARKER begs to inform the Trade that he has the following articles for sale:—

REFINED METALLIC NICKEL.	OXIDE OF COBALT.	[WIRE, &c
REFINED METALLIC BISMUTH.	GERMAN SILVER—IN INGOTS, SHEET	

NICKEL AND COBALT ORES PURCHASED

BELL BROTHERS beg to intimate that, having become SOLE

LICENSEES in the United Kingdom of PROF. DEVILLE'S METHOD of PRODUCING PURE ALUMINIUM, they are now in a POSITION to SUPPLY, from their works here, both this metal and its compound with copper, known under the name of ALUMINIUM BRONZE.—Newcastle-on-Tyne, September, 1860.

THE LONDON AND PROVINCIAL AGRICULTURAL COMPANY (LIMITED).

(REGISTERED).

CHIEF OFFICES AND DEPOT,—40, MARK LANE, LONDON.
ALBERT WORKS, STRANGEWAYS, MANCHESTER.

This company, having obtained the established business of the late Messrs. Thomas Retigan and Co. on most benificent terms, will be PREPARED to SUPPLY, on and after the 1st of September:—

THE ROYAL PATENT CAKE FOR CATTLE, at	£12 10	0 per ton.
THE COMPOUND FEEDING MEAL, at	15 15	0 per ton.
THE ORIGINAL ECONOMIC FOOD FOR CATTLE, at	1 10	0 p. cwt.

And FIRST-CLASS MANURES at ADVANTAGEOUS PRICES.

These celebrated and reliable productions will be manufactured on an extended scale by this company, at the above reduced and legitimate prices; and the public are confidently invited to participate in the lucrative return that must inevitably be rendered from the increasing operations of a business which is already established, highly profitable, and partially patented.

Shares, £1 each; 10s. payable on allotment; for which immediate application is requested, as the list will cease shortly.

Full particulars, prospectuses, and share application forms may be had from the company's agents in each district; the bankers, the London and County Bank, Threadneedle-street, London; the auditors, Messrs. COOPER, BROTHERS, and Co., 13, George-street, Mansion House, London; the brokers, F. EVERETT, Esq., 17 and 18, Royal Exchange, London; and W. POUNTNEY, Esq., Royal Exchange, Manchester; and from the secretary, at the offices.

*** Applications for agencies in unrepresented districts will be entertained.

ALBERT AND MEDICAL LIFE ASSURANCE, 7, WATERLOO PLACE, PALL MALL, LONDON, S. W.

ESTABLISHED 1838.

The business of the Medical, Invalid, and General Life Assurance Society having been amalgamated with the Albert Life Assurance Company, the united business will henceforth be carried on under the above title.

Accumulated fund exceeds	£500,000
Subscribed capital	447,180
Paid-up capital	137,000
Annual income from life premiums, upwards of	220,000

The new business is now progressing at the rate of more than £250,000 per annum.

From Prof. De Morgan's report upon the last valuation of liabilities (end of 1858), and the statements of accounts, it appeared at that time that the surplus in favour of the Albert business alone, after providing for every liability, was £192,925 2s. 11d.

HENRY WILLIAM SMITH, Actuary.
C. DOUGLAS SINGER, Sec.

In the Court of the Vice-Warden of the Stannaries. Stannaries of Devon.

In the Cause of WEBBER v. GOYEN.

TENDERS, stating the highest price that will be given for the MACHINERY, MATERIALS, and EFFECTS now being at and upon the DEVON GREAT WHEAL ELIZABETH MINE, in the parish of Widdicombe, within the said Stannaries, and belonging thereto, will be received at the Registrar's office, Truro, until the 25th day of September inst.

Further information may be had on application to the officer of the Court in possession on the mine, or to H. S. STOKES, Solicitor, Truro
(Agent for W. W. Wreford, Plaintiff's Solicitor, Fowey).

Dated Registrar's Office, Truro, September 10, 1861.

SALE OF VALUABLE FREEHOLD ESTATE.

IRONWORKS and STOCK IN TRADE, &c., at BECK HOLE, near GROSMONT, and about eight miles from WHITBY, in YORKSHIRE.

MESSRS. HEPPER AND SON WILL SELL, BY AUCTION, on Wednesday, the 18th day of September, 1861, at Two o'clock in the afternoon, at the house of Mr. Giddey, the White Horse Hotel, in Boar-lane, in Leeds, subject to such conditions as shall be produced at the time and place of sale,

All that FREEHOLD ESTATE, consisting of about TWENTY-SIX AND A HALF ACRES of LAND, and THIRTY THREE NEW and SUBSTANTIAL STONE BUILT COTTAGES, several other cottages and dwelling-houses, with the OUTBUILDINGS and APPURTENANCES.

Also, all those EXTENSIVE IRONWORKS, for the manufacture of iron, consisting of BLAST FURNACES, iron hoists, worked by pumps; hot air ovens, TWO STEAM ENGINES, BOILERS, ENGINE and BOILER HOUSES, weigh house, blacksmiths', carpenters', and other workshops, offices and premises, together with the commonable and other rights incident to the estate, and all other the real estate, the property of the Whitby Iron Company (Limited). The purchasers of the estate will be required also to purchase of the vendors, at a valuation to be determined in the manner set forth in the conditions of sale, the following, viz.:—

All the STOCK IN TRADE and EFFECTS of the WHITBY IRON COMPANY (LIMITED), in and about the above-mentioned premises, consisting of about THIRTY EIGHT TONS of PIG-IRON, upwards of EIGHT THOUSAND TONS of CALCINED IRONSTONE, a quantity of wood, timber, bricks, water-wheel, coals, slack, coke, hematite ore, iron slag wagons, iron barrows, wrought-iron, wood bridges, sleepers, bridge rails, sand castings, drain tubes, utensils, implements, stock of hay, oats, cattle, and other farming produce, office furniture and utensils, and all other effects and property whatsoever in and upon the premises of which the Whitby Iron Company (Limited) are owners.

Further particulars of the estates and premises, and of the effects, will be given by catalogue, distinguishing those to be sold by auction and those to be purchased by valuation, and may be had, price sixpence, on application to the auctioneers, in Trinity-street, in Leeds aforesaid, on and after Monday, the 9th day of September, 1861.

The premises are situate at or near to Beck Hole and Grosmont, about eight miles from Whitby, in the North Riding of the county of York, are contiguous to the North-Eastern Railway, and the station there, with sidings to communicate, are well supplied with water, abound with quarries of stone, beds of iron ore, and are in immediate contiguity to other large and valuable beds of iron ore, and the whole are advantageously located for carrying on an extensive manufacture of iron.

For further information, apply to BARR, NELSON, and BARR, solicitors, Leeds.

BUDNICK CONSOLS MINE.

MR. R. GREENWOOD WILL PEREMPTORILY SELL, BY PUBLIC AUCTION, on Wednesday next, September 18th, at Three o'clock P.M., at the Royal Hotel, Truro, ONE HUNDRED AND SIXTY (5850ths) PARTS or SHARES in BUDNICK CONSOLS MINE, to be put up in such lots as may suit the convenience of purchasers.

R. GREENWOOD, Auctioneer, Truro.

Truro, September 12, 1861.

NORTH DOWNS AND WHEAL ROSE MINE.

FOR SALE, BY PRIVATE CONTRACT, in One Lot, all those VALUABLE and newly erected ENGINES and MACHINERY, with every requisite for carrying on the mine on a very extensive working, viz.:—

ONE 80 in. PUMPING ENGINE, with FOUR BOILERS, 11 tons each.
ONE 24 in. STEAM WHIM and CRUSHER, and ONE BOILER, 10 tons, in first-rate condition.

Capstan and shears, cat head.
200 fms. 16 in. capstan rope, new.
150 fms. of 7, 15, and 16 in. rods.
160 fms. of pitwork, from 12 to 19 in., with bottoms complete.
5 tons of strapping plates, all of hammered iron.
9 tons of tramroad iron.
400 fms. of wood launders.
10 horse whims, complete.
6 tons of chain.
6 tons of bolts and burs.
4 tons of new iron.
300 fms. of iron stave ladders.
Turning lathe, dial and drawing instruments.
2 tons of staples and glands.
700 common bricks.

Bucket rods, double and single winches, beam and scales, gunpowder, tallow, candles, oil, nails, material house, saw house, grindstone, 6 anvils, 4 smiths' bellows, 2 cranes, 1 vice, smiths' tools, miners' tools, screw stocks, taps and plates, 16 horse whim kibbles, 12 winze ditto; also the account-house furniture.

Sealed tenders will be received by Mr. R. GREENWOOD, the purser, at his office, Truro, for the whole, in One lot, on or before Tuesday, the 24th inst.

For viewing the same, apply to Capt. M. JENKIN, on the mine; Capt. J. VIVIAN, North Roskear, Camborne; or to Mr. R. GREENWOOD, Truro.

Truro, September 12, 1861.

SALE BY AUCTION OF MINE MATERIALS, AT WHEAL EMILY, IN GWITHIAN, NEAR CAMBORNE.

MR. T. H. EDWARDS WILL SELL, BY AUCTION, on Wednesday, the 25th inst., at Ten o'clock, at WHEAL EMILY, in Gwithian, near Camborne, a 26 in. ENGINE, 10 ft. stroke, and BOILER of 12 tons: 30 ft. WATER WHEEL, 2½ ft. breast, with crusher and winding gear attached; capstan and shears, a general assortment of very good pitwork, whim rope, capstan and whim chains, and numerous other articles mentioned in handbills.

September 9, 1861. T. H. EDWARDS, Auctioneer, Helston.

MESSRS. FISHER AND SON WILL SELL, BY AUCTION,

at the house of Mrs. Cork, the Swan Hotel, in Bolton-le-Moors, in the county of Lancaster, on Wednesday, the 25th day of September, 1861, at Six o'clock in the evening, subject to such conditions as shall be then produced, the EXTENSIVE, VALUABLE, and WELL ESTABLISHED ENGINEERING, IRON FOUNDING, and MILLWRIGHT WORKS, known as the UNION FOUNDRY, in BOLTON-LE-MOORS, in the county of LANCASTER.

The land occupied by these works is freehold of inheritance, and contains nearly 4 statute acres, situate in the centre of the town of Bolton, is bounded on the east, south, and part of the north sides by wide and excellent streets, and the London and North-Western Railway extends along and adjoins to the whole of the west side thereof, and communicates with lines of railway of similar gauge laid down through the works.

The BUILDINGS are in good condition, and the works are laid out and adapted throughout to the present requirements of trade.

Several of the WORKSHOPS have been recently entirely rebuilt, and the establishment and working plant have been greatly improved and remodelled during the last few years.

The BUILDINGS comprise large erecting, boring, planing, turning, fitting, and other shops; loam, green sand and brass foundries, boiler shops, forge, smithies, pattern rooms, &c.

The COUNTING-HOUSES and DRAWING OFFICES are large, commodious, well built, of recent erection, and replete with all necessary fixtures, and office furniture and apparatus.

The MANAGER'S HOUSE (adjoining part of the north side of the works) contains a spacious hall, two parlours, two kitchens, five bedrooms, and other conveniences; there are two houses for workmen, and another house for the watch-keeper.

The OUTHOUSING comprises a coach-house, saddle-house, stabling for 12 horses, and all other requisite out-buildings and appurtenances.

The WORKING PLANT consists of FOUR STEAM ENGINES and BOILERS for driving same, with turning lathes, planing, boring, slotting, screwing, drilling, grooving, and wheel-cutting machines, cranes, cupolas, moulding boxes, boiler-making machines, and tools, fans, smiths' hearths, weighing machines, lurries, gas, steam, and water pipes, railways, and all other requisite machinery, tools, implements, and utensils required in a large engineering and millwright establishment.

The PATTERNS include above 1100 of spur, mitre, and bevel wheels, a large assortment of stationary, portable, and marine engines, water-wheels, hydraulic presses, dredging machines, gas apparatus, cranes, bridges, sugar mills, sugar pans, saw mills, pulleys, and general millwork, bleachers, printers, colliery, and other work connected with the requirements of the manufacturing businesses of the district.

The WORKS are adapted for the employment of from 600 to 800 men, and have been in existence above 60 years.

The property may be viewed on application to JOHN HOWARD, Esq., on the premises, and further particulars may be obtained from him, and on application to Messrs. RUSHTON and ARMITSTEAD, solicitors, Bolton, at whose offices a plan of the premises may be seen.

NORTH STAFFORDSHIRE.

TO COAL AND IRONSTONE MASTERS AND CAPITALISTS.
VALUABLE LEASEHOLD MINES OF COAL AND IRONSTONE.

MR. SAMUEL ROWLEY has been honoured by the Chesterton Mining Company, in consequence of the death of one of the proprietors, to OFFER FOR SALE, BY AUCTION, on Thursday, the 17th day of October next, at the Roebuck Hotel, Newcastle-under-Lyme, in the county of Stafford, at Three o'clock in the afternoon precisely, and subject to conditions to be then produced,

All the ESTATE and INTEREST of the CHESTERTON MINING COMPANY, of and in all those VALUABLE MINES, BEDS, and SEAMS of COAL, IRONSTONE, CLAY, and MARL lying and being within or under certain lands situate at Chesterton, in the parish of Wolstanton, in the county of Stafford, comprising 60 statute acres, or thereabouts.

The mines comprise the Blackband, Red Shagg, and Red Mine Ironstone, the Bassey Mine, the Peacock, the Spencroft, the Gubbin Mine, the Great Row and Cannel Mine Coals.

The mines and works are in full operation, and are held under a lease for a term of 21 years, of which eleven years and nine months are unexpired.

The terms of the lease are of the most favourable and advantageous nature for the lessees, who have power to terminate the term at their option.

The whole of the MACHINERY and PLANT belonging to the colliery, which are both modern and substantial, and in good order and repair, will be included in the sale.

The mines are very conveniently situated, and afford to a man of enterprise an opportunity for profitable investment which rarely presents itself.

For further particulars, apply at the Chesterton Mining Company's offices, at Tunstall, Staffordshire; or to Messrs. LLEWELLYN and HILDITCH, solicitors, Tunstall; and Mr. SHERRATT, solicitor, Talk-on-the-hill.—Tunstall, September 10, 1861.

FESTINIOG, NORTH WALES.—The LEASE of a SLATE

QUARRY in the above locality is TO BE DISPOSED OF. It includes upwards of SIX HUNDRED ACRES of GROUND, and by three levels of 75, 50, and 30 yards respectively has been PROVED to have FOUR LARGE VEINS of SLATE ROCK of SPLENDID QUALITY and COLOUR. The ground affords unusual facilities for the development of the works, is situate within 1½ mile of the Festiniog and Portmadoc Railway, and is unquestionably a very valuable property. Want of capital is the cause of sale. All applications must be accompanied with a reference to a London bank, or they will not be attended to.—For particulars, apply to WM. DAVIES, Festiniog, via Carnarvon, North Wales.

FLINTSHIRE.

SHARES in that VALUABLE and PROFITABLE LEAD MINE, called ORSEDD. A HIGH PRESSURE STEAM ENGINE, COMPLETE.

TO BE SOLD, BY AUCTION, at the King's Head Hotel, in the town of Holywell, on Thursday, the 26th day of September inst., at Three o'clock in the afternoon precisely, subject to conditions to be then produced,

NINE (54ths) SHARES of and in the well-known and RICH LEAD MINE, called ORSEDD MINE, in the parish of WHITFORD, in the county of FLINT, and situated on the south-west side of the turnpike-road leading from Holywell to St. Asaph.

This mine is now in full working order, and yields large quantities of lead ore, as may be seen from the ticketings of the sales at Holywell. Several valuable discoveries have been made during the last three years, which produced large profits to the shareholders, and is still in a prosperous state, and the appearances are daily improving.

Also, an excellent HIGH PRESSURE STEAM ENGINE, complete. Diameter of cylinder, 16 in.; stroke, 3 ft. 6 in., and equal to new, having recently undergone thorough repairs, and not been worked since. The engine is constructed on the most approved principle; it comprises cast-iron bed plate, frame and entablature, parallel motion, slide valve, fly-wheel, shaft, and crank. It may be seen at the Mostyn Foundry, near Holywell, at any time previous to the day of sale.

For further particulars, applications to be made to Mr. WILLIAMSON, solicitor, Holywell.

VALUABLE PLASTER MINES AND LAND, AT CHELLASTON, DERBYSHIRE.—TO BE LET, BY TENDER,

for the term of seven years, from the 1st day of November, 1861, all those well known and LUCRATIVE MINES of PLASTER, now in full work, situate in the parish of CHELLASTON aforesaid, and about four miles distant from the town of DERBY, with a COMMODIOUS WHARF and BUILDINGS thereon, lying by the side of the Derby Canal at Shilton Bridge, and adjoining the turnpike-road leading from Chellaston to Derby. And also about FORTY ACRES of PASTURE and ARABLE LAND, with a COTTAGE thereon, lying over the said mine or contiguous thereto.

The above mines have been worked by the late Mr. George Wooton for a considerable period, and the plaster raised therefrom is of a very superior quality, and commands an extensive sale. The present connection is large, and highly respectable. A good road leads from the mines to the said turnpike-road, the former being distant about ¼ mile from the aforesaid wharf; and a wharf on the Trent and Mersey Canal may be rented if wished.

The lessee will be required to take to the steam-engine and pump now in use at the mines at a valuation, and to find satisfactory security for the payment of the rents, and for the due observance of the covenants and stipulations to be contained in the lease.

The rent to be paid for the plaster will be a royalty per (standard) ton for each of the different qualities of plaster worked and got, the lessee at the same time binding himself to pay a fixed minimum rent, and the tender should be made in the alternative—viz., either to pay a separate royalty per ton for each quality of stone, or an average royalty per ton for all qualities.

Tenders, specifying the royalties offered in respect of the plaster, the minimum rent offered, and the rent offered in respect of the land, cottage, wharf, and buildings are required to be sent in to Messrs. E. and T. FISHER, solicitors, Ashby de la Zouche, on or before the 30th day of September, 1861.

The proprietors do not bind themselves to accept the highest or any other tender.

It is probable that about 20 acres of additional pasture land may be let from year to year with the before-mentioned land if desired.

To view the mines and premises, application should be made to Mr. JAMES PIMM, of Chellaston; and any further information may be obtained of Messrs. WOODHOUSE and JEFFCOCK, mineral agents, Derby; or of Messrs. E. and T. FISHER, solicitors, Ashby de la Zouch.

TO BLACKSMITHS, CHAIN MAKERS, FOUNDERS, AND OTHERS.

TO BE SOLD, BY PRIVATE CONTRACT, all that BLOCK of well and recently built PROPERTY on the NORTH SIDE of WEAR STREET to the CORNER of HUDDLESTON STREET, MONKWEARMOUTH SHORE, near the Ferry Landing, consisting of six shops, Nos. 73, 74, 75, 76, 77, and 78, and offices above, with separate entrance from Huddleston-street, and smiths' large jobbing shop, with nine fires adjoining; in the Back-row, chain makers' shop, with eleven fires, testing machine, and steam-engine attached; an excellent foundry, with two cupolas, cranes, engine, fire blast, and all necessary apparatus; on the opposite side of Back-row are a stable, iron warehouse, foreman's office, hay-loft, and fitting, drilling, and pattern shops, with necessary machines.

The above premises are adjacent to the River Wear, and form one of the best works of the kind, in a first-rate business situation.

For further particulars, apply to Messrs. A. J. and WM. MOORE, solicitors, 4, Bridge-street.—Sunderland, August 28, 1861.

NEW COLLIERY, NAILSEA, NEAR BRISTOL—

FOR SALE, BY PRIVATE CONTRACT, the WHOLE of the PLANT and MATERIALS at the above colliery, comprising—

ONE HIGH PRESSURE DIRECT ACTING PUMPING ENGINE, cylinder 45 in. in diameter, and 10 ft. stroke.
ONE HIGH PRESSURE WINDING ENGINE and gear, cylinder 12 in. diameter.
ONE HIGH PRESSURE WINDING ENGINE, cylinder 16 in. diameter.
THREE CYLINDRICAL BOILERS, 41 ft. by 6 ft.
ONE CYLINDRICAL BOILER, 18 ft. by 4 ft.
ONE CYLINDRICAL BOILER, 20 ft. by 3 ft. 6 in.

Hammered iron pumping cranks, T bobs, 19 in., 14½ in., 5½ in., 5 in., and 4½ in. forcing, lifting, and hand pumps; hammered iron straps, double straps and tail joints, buckets, clacks, wrought-iron cistern, lifting screws, chains, large capstan, double-power crab winch, 80 fms. 10½ capstan rope, 8 in. capstan and other ropes, blocks, boring tools, wrought-iron air pipes, tram plates, smiths' bellows and tools, wagons, carts, &c.

To view, apply at the colliery; and for all further particulars, to BODDAM CASTLE, Esq., No. 29, Corn-street, Bristol.

TO BE LET, for such a term as may be agreed on, from 25th March next, the LONG BENTON COLLIERY, near Newcastle-on-Tyne, the property of the Right Hon. the Earl of Carlisle.

At this colliery the High Main Seam has been carefully tubbed off, and the shafts sunk to the Low Main Seam, which is now in working.

The engines, screens, and other stock upon the colliery may be taken at a valuation.

Further information can be obtained on application to M. LIDDELL, Esq., Hedgefield, Newcastle.—September 2, 1861.

CREASE'S PATENT EXCAVATING MACHINERY,

for SUPERSEDING the SLOW and EXPENSIVE USE of MANUAL LABOUR in SINKING SHAFTS, DRIVING LEVELS, TUNNELLING, &c., can now be supplied to the public. The machinery is guaranteed to drive through any rock of average hardness at a minimum rate of 1 fm. per diem, and to sink shafts at the rate of 2 fms. in three days.

Applications to be addressed to Mr. GEORGE T. CURTIS (sole agent), 17, Gracechurch-street, London, E.C.

By providing the power of calculating the time and cost to explore a certain depth and extent of ground, speculation in mining will be assimilated to commercial pursuits, with this unmistakable advantage—that when the ground has been once carefully and judiciously selected, and operations properly and systematically carried out for its development, there would be far less chance of unsatisfactory results than are met with by merchants and manufacturers in the usual routine of their business. As this important invention must beneficially interest the landowners, mine proprietors, merchants, and miners, we opine it will meet with immediate adoption.—*Mining Journal.*

WALKER'S STAMPING MACHINES AND STEAM ENGINES, for REDUCING ALL KINDS of MINERAL ORES to IMPALPABLE POWDER,

have been in use for these last ten years in all the leading mines of the United Kingdom and the Colonies of the British Empire; as have also his PATENT PUMPS and WATER LIFTS, and for economy of working and durability cannot be equalled. MANUFACTORY, 17, COWPER STREET, CITY ROAD, LONDON.

BAILEY'S PATENT STEAM GAUGE.—

This truly valuable invention is most undoubtedly the only gauge ever invented not affected by those atmospheric changes and many other evil influences, which are the bane of all spring, mercurial, and compressed air gauges.

The grand principle of the gauge being founded upon that sublime law of nature, "GRAVITY," which, like all other natural laws, is unerring and unchangeable—it must continue to indicate correctly to an indefinite period of time.

After most critical trials and examinations by some of the most eminent locomotive and stationary engineers, mining and manufacturing companies in this kingdom, it is pronounced by them to be "THE ONLY TRULY INDICATING GAUGE NOW IN EXISTENCE."

HEAD OFFICES.

30, COOPER STREET, MANCHESTER, Mr. WM. TATE, Sole Wholesale Agent.

MANUFACTORY.

ALBION TURRET CLOCK WORKS, SALFORD, MANCHESTER.

INCRUSTATION OF STEAM BOILERS.—EASTON'S

PATENT BOILER FLUID EFFECTUALLY REMOVES and PREVENTS INCRUSTATION in STEAM BOILERS, WITHOUT INJURY to the METAL, with GREAT SAVING in FUEL, and with LESS LIABILITY to ACCIDENT from EXPLOSION. It is used by Her Majesty's Steam Storeships, Woolwich Arsenal, Honourable Corporation of Trinity House, Tower of London, India Store Department, by the principal Steam Packet Companies of London, Liverpool, Southampton, Hull, &c., and by engineers, builders, railway companies, and manufacturers throughout the country. Testimonials from eminent engineers, boiler makers, and manufacturers, with full particulars, will be forwarded on application to P. S. EASTON and G. SPRINGFIELD, sole manufacturers and patentees, Nos. 37, 38, and 39, Wapping-wall, London, E.

AGENTS IN GREAT BRITAIN.

Aberdeen, Mr. James F. Wood.
Ashton-under-Lyne, Mr. S. G. Fielden.
Belfast, Mr. W. T. Mattier, C.E.
Birmingham, Mr. Adam Dixon.
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Frome, Mr. W. B. Harvey, Chemist.
Glasgow, Mr. W. Mutrie.
Hartlepool, Mr. W. T. Cheesman, West Hartlepool.
Hull, Messrs. A. L. Fleming and Co.
Leeds, Mr. J. C. P. Westwood.
Leicester, Mr. Benjamin Pochin.
Liverpool, Mr. J. McInnes.
Manchester, Messrs. Morris and Sutton, Princess Chambers.
Nottingham, Mr. G. D. Hughes.
Oldbury, Mr. C. Tonge, Chemist.
Southampton, Mr. Joseph Clark.
Southsea, Mr. T. Cheesman.
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Wexford, Mr. Thomas Waring.

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BASTIER'S PATENT CHAIN PUMP, APPARATUS FOR RAISING WATER ECONOMICALLY, ESPECIALLY APPLICABLE TO ALL KINDS OF MINES, DRAINAGE, WELLS, &c.

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3.—It occupies a very small space.
4.—It raises water from any depth with the same facility and economy.
5.—It raises with the water, and without the slightest injury to the apparatus sand mud, wood, stone, and every object of a smaller diameter than its tube.
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A mining pump can be seen daily at work, at Wheal Concord Mine, South Sydenham, Devon, near Tavistock; and a shipping pump at Woodside Graving Dock Company (Limited), Birkenhead, near Liverpool. 113

J. U. BASTIER, sole manufacturer, will CONTRACT to ERECT his PATENT PUMP at HIS OWN EXPENSE, and will GUARANTEE IT FOR ONE YEAR, or will GRANT LICENSES to manufacturers, mining proprietors and others, for the USE of his INVENTION.

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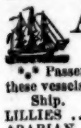

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*** Passengers holding Victoria passage warrants will be forwarded to Melbourne by these vessels.

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BROAD AND NARROW GAUGE COAL AND IRONSTONE WAGONS, IN STOCK—FOR SALE OR HIRE. 120

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ALL DESCRIPTIONS OF RAILWAY WAGONS FOR SALE OR HIRE.
MANUFACTURER OF ALL KINDS OF RAILWAY IRONWORK. 121

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GUN-METAL STEAM GLAND COCKS, WATER GAUGES, &c. 127

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CORNISH BORER STEEL.—Upwards of ONE HUNDRED AND SIXTY MINES are SUPPLIED with this STEEL, and the DEMAND for it is RAPIDLY INCREASING.—For terms, apply to R. MUSHET and Co., Forest Steel Works, near Coleford, Gloucestershire. 129

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Address to the Works, Coleford. 130

FARRAR'S PATENT STEEL COMPANY, WARDSEND STEEL WORKS, SHEFFIELD, MANUFACTURERS of BEST CAST STEEL, MALLEABLE and MILD STEEL CASTINGS, SUPERIOR CAST-STEEL FILES, &c., CALL the ATTENTION of ENGINEERS and all users of FIRST-CLASS STEEL to the GREAT SUPERIORITY of STEEL MANUFACTURED under this PATENT. Prices:—

First quality	£50 per ton.
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LONDON OFFICE, 21, BOW LANE, CANNON STREET WEST, E.C.,
Where all communications are to be addressed. 131

LESLIE'S PATENTS: GAS AND COKE FROM COMMON COAL GREATLY INCREASED IN VALUE.
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LESLIE'S PATENTS: UP TO FORTY CANDLE GAS.
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LESLIE'S PATENTS: THE NATIONAL WASTE HEAPS AT COLLIERIES UTILISED FOR GAS PURPOSES.
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WIRE-ROPE TESTING.

PUBLIC TEST of A. J. HUTCHINGS AND CO.'S PATENT WIRE-ROPE at LIVERPOOL, FEBRUARY 27, 1861.
[From the *Daily Post* of March 1, 1861.]

On Wednesday, the 27th of February, a series of EXPERIMENTS on WIRE-ROPE took place at the Corporation Testing Works, King's Dock. The specimens tested were manufactured by the well-known firm of A. J. HUTCHINGS and Co., of Millwall, London, the Contractors to the Lords of the Admiralty and various foreign Governments, the character of whose rope is so well known in this country, as well as all parts of the Continent. Capt. Ducraft, of H.M.S. *Hastings*, and a number of other gentlemen connected with shipping, were present to witness the experiments, all of which were considered highly satisfactory, and in every respect sustained the reputation of the manufacturers. The following are the results of the experiments:—

An 8 in. rope bore 70 tons WITHOUT BREAKING.

Circumference and breaking strain.

2¼	2½	3	3½	3⅝	4	4½
10¾ tons	14 tons	20 tons	27 tons	29 tons	32¾ tons	45½ tons

N.B.—The 2¼, 3, and 4 in. ropes were the sizes actually tested. The remaining sizes and strains are comparative.

THE ABOVE ROPES ARE FOR COLLIERY USE.

Size. Inches.	Hutchings and Co.'s wire-rope for ships' rigging. Tested Feb. 27, 1861.	Newall and Co.'s Test of Oct. 29, 1860.	Garnock, Bibby, and Co.'s Test, Oct. 29, 1860.
2	5 tons 15 cwts.	—	—
2¼	11 " 14 "	7 tons 15 cwts.	8 tons 16 cwts.
3⅜	16 " 10 "	—	—
3½	22 " 8 "	—	18 " 5 "
3⅝	23 " 10 "	16 " 10 "	—
4	29 " 10 "	18 " 15 "	—
4½	37 " 15 "	—	26 " 10 "

N.B.—The 2, 3⅜, and 4 in. ropes were the actual sizes tested. The remaining sizes and strains are comparative.

The above tests certified by Mr. M'Donald the Superintendent of the Corporation Testing Works, Liverpool.

HEMP AND WIRE-ROPES.

JOHN STEPHENS AND SON, HEMP AND WIRE-ROPE WORKS, ASHFIELD, FALMOUTH, CORNWALL,
MANUFACTURERS of FLAT and ROUND HEMP and WIRE-ROPES, GUIDE RODS for SHAFTS, GALVANISED WIRE SIGNAL LINE and STRAND FENCING, &c., for MINES, RAILWAYS, &c.
A first-class medal was awarded to JOHN STEPHENS and SON for their manufactures by the Royal Cornwall Polytechnic Society, in 1860. 133

PATENT SAFETY FUSE.—The GREAT EXHIBITION PRIZE MEDAL was AWARDED to the MANUFACTURERS of the ORIGINAL SAFETY FUSE, BICKFORD, SMITH DAVEY, and PRYOR who beg to inform Merchants, Mine Agents, Railway Contractors, and all persons engaged in Blasting Operations, that, for the purpose of protecting the public in the use of a genuine article, the PATENT SAFETY FUSE *has now a thread wrought into its centre*, which, being patent right, infallibly *distinguishes it from all imitations*, and ensures the continuity of the gunpowder.
This Fuse is protected by a Second Patent, is manufactured by greatly improved machinery, and may be had of any length and size, and adapted to every climate.
Address,—BICKFORD, SMITH, DAVEY, and PRYOR, Tuckingmill, Cornwall. 135

MESSRS. W. BRUNTON AND CO. have great pleasure in informing their customers and friends, and the mining community, that they have RESUMED MANUFACTURING, at their PENHELLICK WORKS, POOL, near CAMBORNE, and are PREPARED as before to SUPPLY SAFETY FUSE of a QUALITY which CANNOT BE SURPASSED.
BRANCH WORKS, BRYMBO, NEAR WREXHAM. 136

DAVEY'S PATENT BLASTING POWDER, MANUFACTURED BY DAVEY BROTHERS AND CO., NANCEKUKE POWDER WORKS, TUCKINGMILL, CORNWALL.
This blasting powder possesses the following advantages over every other in use:—Its COMBUSTION is SLOWER and MORE PERFECT when confined in the hole, PRODUCES LESS SMOKE, is LESS DANGEROUS, and it generally BURSTS MORE ROCK with a CHARGE OCCUPYING the SAME sPACE, but WEIGHING from TWENTY to THIRTY PER CENT. LESS than other powder, EFFECTING an IMPORTANT SAVING.
DAVEY BROTHERS and Co. beg to state that this powder is specially made for blasting, and from its slow combustion is not adapted for projectiles. They would, therefore, caution consumers against the efforts of interested parties to put it to a fallacious trial, by firing a ball from a mortar, which is no test of its explosive force when confined. 137

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VICTORIA WORKS, BEDFORD,
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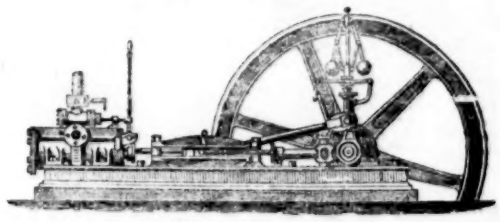

HIGH PRESSURE STEAM ENGINES, from 2½ to 30 horse power, and upwards, adapted for MILLS, AGRICULTURAL, MINING, and GENERAL PURPOSES. The following sizes are ready for immediate delivery, and may be seen at any time at their London depôt:—

ONE 5 in. cylinder, 10 in. stroke.	ONE 12 in. cylinder, 36 in. stroke.
TWO 8 in. cylinder, 18 in. stroke.	ONE 14 in. cylinder, 36 in. stroke.
ONE 10 in. cylinder, 18 in. stroke.	ONE 17 in. cylinder, 36 in. stroke.
ONE 14 in. cylinder, 24 in. stroke.	TWO 20 in. cylinder, 36 in. stroke.

Prices and full particulars sent on application. 138

MESSRS. KNOWLES AND BUXTON, CHESTERFIELD
MANUFACTURERS OF PATENT TUBULAR TUYERES.

Having been very successful in MANUFACTURING and REPAIRING the PATENT TUBULAR TUYERES, and securing our patent for a further term of years, we have great pleasure in offering them to the public, at a considerable REDUCTION IN PRICE.

Our manner of repairing will make them as LARGE and GOOD AS WHEN NEW (which is not the case with the ordinary tuyere) for half the first cost, when there is not more than two coils destroyed at the nozzle, all parties returning them carriage paid, and are confident they will be the cheapest and best ever offered to the mining world.

The PATENT TUBULAR TUYERES having maintained a most honourable reputation since their introduction, and been thoroughly proved to answer all the purposes set forth by the proprietors (when properly treated), it is, therefore, deemed unnecessary to publish a list of the patrons, or enumerate cases of their success. Although by such a procedure very much might be said in their favour, yet the readers would never be so fully convinced of their sterling worth as by a practical trial.

The future scale of prices will be as follows, including sockets:—

No. 1 Tuyere, 16 in. long			28s. each.
No. 2	"	18 "	32s. "
No. 3	"	20 "	36s. "
No. 4	"	22 "	40s. "
No. 5	"	24 "	44s. "

Delivered at Chesterfield station. Terms, nett cash quarterly. 139

CLAYTON, SHUTTLEWORTH, AND CO.,
AGRICULTURAL AND GENERAL ENGINEERS,
LINCOLN, and 78, LOMBARD STREET, LONDON.

MANUFACTURERS OF
PORTABLE and FIXED STEAM ENGINES,
Which are adapted for every purpose to which steam-power can be applied. When intended for winding they are fitted with reversing link motion and requisite gearing. The portable engines are easy of removal from place to place, and may be set to work immediately on arrival.

COMBINED THRASHING MACHINES,
Which dress the corn ready for market at one operation.

GRINDING and MORTAR MILLS,
SAWING MACHINERY,
PUMPS for IRRIGATION and MINING PURPOSES.

Full particulars and estimates supplied on application to CLAYTON, SHUTTLEWORTH, and Co., as above. 140

PORTABLE STEAM ENGINE COMPANY (LIMITED).
CITY OFFICE, 5, ADAM'S COURT, OLD BROAD STREET.
DEPOT,—92, BLACKFRIARS ROAD.

PATENT PORTABLE STEAM ENGINE, WITH REVERSING GEAR.
PORTABLE STEAM ENGINES LENT ON HIRE, from 4 to 25 horse power.
Every information can be obtained on application to Mr. DUNSFORD, at the City office; or to Mr. CRESSWELL, the company's engineer, at the depôt. 141

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MANUFACTURED BY THE INVENTOR,
JOSEPH HALEY,
ALBION STREET, GAYTHORN, MANCHESTER.

SCREW JACKS, SHIP JACKS.

SLIDE AND CENTRE LATHES,
PLANING, SHAPING, BORING, DRILLING,
SCREWING, WHEEL CUTTING,
AND OTHER MACHINES.

RIVET MAKING MACHINES. 142

TO BRASSFOUNDERS, ENGINEERS, REFINERS, &c.—The PATENT PLUMBAGO CRUCIBLE COMPANY beg to CALL the ATTENTION of all users and shippers of melting pots to the GREAT SUPERIORITY of the PATENT CRUCIBLES, which have been used during the last three years by some of the largest melters in England and abroad. In addition to their capabilities of melting an average of from 35 to 40 pourings, they are unaffected by change of temperature, never crack, but can be used till worn out, requiring only one annealing for several days' work, and become heated much more rapidly than ordinary pots, EFFECTING thereby a SAVING of more than FIFTY PER CENT. in time, labour, fuel, and waste. The Patent Plumbago Crucible Company also manufacture and import clay crucibles, muffles, portable furnaces, sublimate pans and covers, glass pots, all descriptions of fire-standing goods, and every requisite for the assayer and dentist.

Also, sole proprietors of fine POWDERED PURE FLOUR PLUMBAGO, which they can confidently recommend for anti-friction purposes, being an impalpable powder, and warranted perfectly free from grit and any impurity. For ordinary polishing purposes it will be found superior to any of the black leads offered. Price, £27 10s. per ton; 30s. per cwt. Samples of 28 lbs. forwarded on receipt of 8s. Packages free.

For Lists, Testimonials, &c., apply to the BATTERSEA WORKS, London, S.W. 143

THE MINING SHARE LIST.

DIVIDEND MINES.

Shares.	Mines.	Paid.	Last Pr.	Business.	Dividends Per Share.	Last Paid.
4000	Bedford United (copper), Tavistock†	2 6 8..	5 ..	4¼ 5 ..	12 7 0.. 0 3 6	—June, 1861
240	Boscean (tin), St. Just†	20 10 0..	50 ..	..	33 0 0.. 1 10 0	—May, 1861
200	Botallack (tin, copper), St. Just	240 ..	..	..	443 5 0.. 2 10 0	—Feb. 1860
1000	Carn Brea (copper, tin), Illogan†	15 0 0..	70 ..	75 77¼ ..	269 10 0.. 2 0 0	—Feb. 1861
2048	Carnyorth (tin), St. Just	3 10 0..	13¼..	..	0 19 6.. 0 2 0	—Sept. 1860
200	Cefn Cwm Brwyno (lead), Cardiganah.	33 0 0..	33 ..	..	9 0 0.. 4 0 0	—April, 1861
50000	Counorree (copper, sulphur) (L. £1)..	1 0 0..	13¼..	13¼ ..	0 0 9.. 0 0 9	—July, 1860
2450	Cook's Kitchen (copper), Illogan	17 0 9..	31 ..	30 32 ..	0 13 0.. 0 5 0	—Sept. 1861
12000	Copper Miners of England	25 0 0..	25 ..	..	7½ per cent.	— Half-yrly.
350000	Ditto ditto (stock)	100 0 0..	24 ..	..	1 per cent.	— Half-yrly.
1055	Craddock Moor (copper), St. Cleer*	8 0 0..	26 ..	..	5 13 0.. 0 5 0	—July, 1861
867	Cwm Erfin (lead) Cardiganshire	7 10 0..	16½..	..	5 8 0.. 1 0 0	—June, 1861
128	Cwmystwith (lead), Cardiganshire*	60 0 0..	240 ..	..	227 10 0.. 5 0 0	—May, 1861
280	Derwent Mines (sil.-lead), Durham	300 0 0..	180 ..	..	142 0 0.. 5 0 0	—June, 1861
1024	Devon Gt. Con. (cop.), Tavist.* [S.E.]	1 0 0..	360 ..	350 ..	760 0 0.. 7 0 0	—July, 1861
358	Dolcoath (copper, tin), Camborne*	128 17 6..	510 ..	..	633 10 0.. 7 0 0	—Aug. 1861
512	East Basset (cop.), Redruth [S.E.]*	29 10 0..	85 ..	80 85 ..	87 0 0.. 5 0 0	—July, 1861
6144	East Caradon (copper), St. Cleer [S.E.]	2 14 6..	28¼..	25¾ 26¼ ..	0 17 6.. 0 10 0	—July, 1861
300	East Darren (lead), Cardiganshire*	32 0 0..	67 ..	..	77 10 0.. 1 0 0	—Aug. 1861
2048	East Wheal Lovell (tin), Wendron	2 10 0..	— ..	..	0 5 0.. 0 5 0	—July, 1859
1400	Eyam Mining Co. (lead), Derbyshire	5 0 0..	— ..	..	20 3 4.. 0 10 0	—May, 1861
4940	Fowey Consols (copper), Tywardreath	4 0 0..	5 ..	..	41 9 3.. 0 2 6	—June, 1860
2560	Foxdale, Isle of Man, Limited (lead)†	25 0 0..	35 ..	..	61 8 3.. 1 0 0	—Dec. 1860
5000	Frank Mills (lead), Devon	3 18 6..	4¼..	..	0 11 0.. 0 3 0	—July, 1861
6000	Great South Tolgus [S.E.], Redruth*	0 14 6..	4¼..	4 4¼ ..	7 13 6.. 0 5 0	—Feb. 1861
1798	Great Wheal Fortune, Breage	18 6 0..	13 ..	14½ 15¼ ..	1 0 0.. 0 10 0	—July, 1861
5908	Great Wh. Vor (tin, cp.), Helston [S.E.]	40 0 0..	6 ..	..	0 5 0.. 0 5 0	—Mar. 1861
1024	Herodsfoot (id.), near Liskeard [S.E.]	8 10 0..	35 ..	34 36 ..	14 10 0.. 2 0 0	—June, 1861
1000	Hibernian Mine Company	92 6 2..	— ..	..	7 10 0.. 0 15 0	—Sept. 1861
160	Levant (copper, tin), St. Just	2 10 0..	95 ..	..	1091 0 0.. 5 0 0	—May, 1860
400	Lisburne (lead), Cardiganshire, Wales*	18 15 0..	125 ..	..	375 10 0.. 2 0 0	—Aug. 1861
9000	Marke Valley (copper), Caradon	4 10 6..	10½..	10½ 10½ ..	1 1 0.. 0 5 0	—July, 1861
8000	Mendip Hills (lead) [L.], Somerset	3 15 0..	13¾..	..	2 1 0.. 0 2 6	—May, 1860
1800	Minera Mining Co. [L.], (id.), Wrexham	25 0 0..	180 ..	..	75 0 9.. 4 0 0	—Aug. 1861
30000	Mining Co. of Ireland (cop., lead, coal)	7 0 0..	14¼..	14¼ ..	14 7 11.. 0 7 0	—June, 1861
640	Mount Pleasant, Mold	4 0 0..	25 ..	..	14 7 7.. 0 10 0	—Sept. 1861
6000	New Birch Tor and Vitifer Consols	1 6 8..	2 ..	2 2¼ ..	0 3 6.. 0 1 0	—Sept. 1861
6000	North Downs (copper) Redruth	2 3 4..	5½..	5¾ 6 ..	0 2 6.. 0 2 6	—Aug. 1861
1366	North Grambler, Redruth	2 7 6..	6 ..	..	0 10 0.. 0 10 0	—Mar. 1861
6000	North Great Work, Breage	1 3 0..	4½..	..	0 2 0.. 0 2 0	—May, 1860
5000	Orsedd (lead), Flintshire	0 0 8..	1¼..	..	0 6 6.. 0 0 9	—Mar. 1861
6400	Par Consols (cop.), St. Blazey [S.E.]	1 2 6..	10 ..	9 9½ ..	36 4 6.. 0 5 0	—July, 1861
200	Parys Mines (copper), Anglesey [L.]	50 0 0..	— ..	..	7 10 0.. 2 10 0	—April, 1861
200	Phœnix (copper, tin), Linkinghorne	100 0 0..	435 ..	..	449 10 0.. 55 0 0	—May, 1861
1772	Polberro (tin), St. Agnes	— ..	5 ..	..	6 9 6.. 0 15 0	—April, 1861
1120	Providence (tin), Uny Lelant† [S.E.]	10 6 7..	40 ..	42 44 ..	60 15 0.. 1 0 0	—Aug. 1861
16	Rhosesmor	50 0 0..	— ..	..	1250 0 0.. 100 0 0	—
512	South Caradon (cop.), St. Cleer* [S.E.]	1 5 0..	305 ..	300 305 ..	351 0 0.. 5 0 0	—July, 1861
512	South Tolgus (cop.), Redruth, Cornwall*	8 0 0..	40 ..	27½ 30 ..	102 10 0.. 1 0 0	—April, 1861
496	South Wheal Frances, Illogan* [S.E.]	18 18 9..	125 ..	114 117 ..	356 5 0.. 1 0 0	—Sept. 1861
280	Spearne Moor (tin, copper), St. Just	31 17 9..	45 ..	..	9 15 0.. 1 0 0	—June, 1861
940	St. Ives Consols (tin), St. Ives†	8 0 0..	31 ..	30 32 ..	484 0 0.. 0 15 0	—May, 1861
9600	Tamar Con. (sil.-ld.), Beeralston [S.E.]	4 10 0..	13½..	..	5 6 0.. 0 2 6	—Jan. 1861
6000	Tincroft (cop., tin), Pool, Illogan [S.E.]	9 0 0..	6¼..	6 6¼ ..	10 8 6.. 0 5 0	—Feb. 1861
6000	Tolvadden (copper), Marazion	— ..	2½..	..	0 13 6.. 0 3 0	—Mar. 1860
572	Trelyon Consols (tin), St. Ives	11 10 0..	16 ..	17½ 20 ..	7 0 0.. 0 10 0	—Sept. 1860
200	Trumpet Consols (tin), near Helston	57 10 0..	100 ..	..	52 0 0.. 2 0 0	—May, 1861
1024	Wendron Consols (tin), Wendron	11 13 10..	12 ..	12 14 ..	8 15 0.. 1 0 0	—Jan. 1861
6000	West Basset (copper), Illogan [S.E.]	1 10 0..	17 ..	..	21 15 0.. 0 5 0	—July, 1861
60	West Burton Gill (lead), Yorkshire	50 0 0..	— ..	..	14 10 0.. 3 0 0	—June, 1861
1024	West Caradon (cop.), Liskeard [S.E.]*	5 0 0..	38 ..	40 42 ..	98 1 3.. 1 10 0	—July, 1861
256	West Damsel (copper), Gwennap	37 0 0..	55 ..	58 ..	45 0 0.. 1 0 0	—May, 1860
6400	West Fowey Consols (tin and copper)	7 10 0..	5 ..	..	0 14 0.. 0 2 0	—May, 1861
400	W. Wh. Seton (cop.), Camborne [S.E.]*	47 10 0..	327½..	330 340 ..	315 0 0.. 7 0 0	—Aug. 1861
512	Wheal Basset (copper), Illogan* [S.E.]	5 2 6..	87½..	..	572 10 0.. 2 0 0	—Aug. 1861
256	Wheal Buller (cop.), Redruth* [S.E.]	5 0 0..	95 ..	85 90 ..	929 0 0.. 2 0 0	—May, 1861
2900	Wh. Clifford Amalgamated (cp.), Gwen.	30 0 0..	— ..	30 ..	16 0 0.. —	—Aug. 1861
2060	Wheal Falmouth and Sperries	2 5 0..	8 ..	..	0 10 0.. 0 10 0	—Feb. 1861
128	Wheal Friendship (copper), Devon	50 0 0..	90 ..	..	2400 10 0.. 5 0 0	—Feb. 1861
512	Wheal Jane (sliver-lead), Kea	3 10 0..	18 ..	..	10 10 0.. 1 0 0	—Feb. 1860
1024	Wheal Kitty (tin), Uny Lelant [S.E.]	1 7 2..	11 ..	6¼ 7 ..	8 0 0.. 0 10 0	—Sept. 1860
4800	Wheal Ludcott (lead), St. Ive	2 10 8..	3¼..	3¼ 3⅜ ..	1 8 0.. 0 4 0	—July, 1861
896	Wh. Margaret (tin), Uny Lel. [S.E.]†	9 17 6..	43 ..	44 46 ..	69 0 0.. 1 0 0	—Aug. 1861
100	Wheal Mary (tin), Lelant	36 2 6..	440 ..	..	280 5 0.. 7 0 0	—June, 1860
1024	Wh. Mary Ann (id.), Menheniot [S.E.]†	8 0 0..	10 ..	9 10 ..	54 7 6.. 0 10 0	—Sept. 1861
80	Wheal Owles, St. Just, Cornwall	70 0 0..	300 ..	..	280 13 0.. 5 0 0	—Aug. 1861
8000	Wicklow (copper) [L.], Wicklow	5 0 0..	59 ..	..	41 17 6.. 2 12 6	—Mar. 1861

[* Dividends paid every two months. † Dividends paid every three months.]

MINES WITH DIVIDENDS IN ABEYANCE.

700	Aberdovey (silver-lead), Merioneth	1 10 0..	30 ..	..	0 10 0.. 0 10 0	—Mar. 1859
5120	Alfred Consols (cop.), Phillack [S.E.]	2 17 1..	1 ..	..	20 3 0.. 0 2 6	—April, 1859
1624	Balleswidden (tin), St. Just	11 15 0..	12 ..	..	12 5 0.. 0 5 0	—Jan. 1854
1200	Brightside & Froggatt Grove, Derbysh.	3 0 0..	3½..	..	3 0 0.. 3 0 0	—April, 1856
200	Brynford Hall (lead), Flintshire	15 10 0..	23 ..	21 23 ..	14 0 0.. 2 10 0	—Oct. 1860
2500	Central Minera (lead) [L. £5]	0 15 0..	5½..	..	0 4 0.. 0 4 0	—Sept. 1859
6000	Charlotte United, Perranuthnoe	2 3 2..	24s. ..	1 ..	0 13 0.. 0 1 6	—Sept. 1859
2000	Collacombe (copper), Lamerton	5 5 0..	12 ..	..	3 5 0.. 0 8 0	—Dec. 1857
256	Condurrow (cop., tin), Camborne	20 0 0..	60 ..	..	85 0 0.. 2 0 0	—June, 1857
256	Copper Hill (copper) Redruth	48 0 0..	117½..	117½ 122½ ..	2 10 0.. 2 10 0	—Sept. 1859
4076	Devon and Cornwall (copper)	5 6 3..	6 ..	..	0 10 0.. 0 2 6	—Feb. 1859
672	Ding Dong (tin), Gulval	39 2 6..	19 ..	20 25 ..	16 7 6.. 1 10 0	—Mar. 1857
12800	Drake Walls (tin, copper), Calstock	2 1 0..	1 ..	18s. 20s. ..	0 13 6.. 0 2 0	—Sept. 1857
2048	East Falmouth (sil.-ld.), Kenwyn, Kea	2 15 0..	¼..	..	0 7 6.. 0 2 6	—Jan. 1858
128	East Pool (tin, copper), Pool, Illogan	24 5 0..	400 ..	280 290 ..	305 0 0.. 2 10 0	—Aug. 1858
6000	General Mining Co. for Irel. (cop., ld.)	4 0 0..	5½..	..	1 0 8.. 0 3 3	—June, 1853
486	Grambler and St. Aubyn (cop.) [S.E.]	47 10 0..	12 ..	11 13 ..	23 0 0.. 1 0 0	—July, 1860
119	Great Work (tin), Germoe	100 0 0..	110 ..	..	221 10 0.. 7 10 0	—Feb. 1857
200	Herward United (lead), Flintshire	40 0 0..	10 ..	..	3 0 0.. 1 10 0	—July, 1860
6000	Hingston Down Con. (cop.), Cals. [S.E.]	4 18 0..	3¼..	2⅞ 3 ..	2 16 0.. 0 2 6	—Nov. 1856
8000	Kelly Bray (lead, copper), Callington	4 6 0..	1 ..	..	0 6 0.. 0 2 0	—Feb. 1860
20	Laxey Mining Company, Isle of Man	100 0 0..	1200 ..	..	1420 0 0.. 50 0 0	—June, 1857
470	Newtownards Mining Co., Co. Down	50 0 0..	35 ..	..	56 0 0.. 1 0 0	—Sept. 1858
700	North Roskear (copper), Camborne	17 0 0..	17 ..	17 19 ..	157 0 0.. 4 0 0	—Sept. 1853
512	Rosewarne United (cop., tin), Gwinear	19 6 4..	21½..	20 22 ..	33 10 0.. 1 0 0	—Sept. 1860
12000	Sortridge Con. (cop.), Whitchurch [S.E.]	0 16 0..	12s. ..	7s. 9s. ..	0 10 0.. 0 2 6	—July, 1857
128	South Crinnis (copper), St. Austell	19 0 0..	285 ..	..	60 0 0.. 20 0 0	—June, 1855
20000	St. Day United (tin and cop.), Redruth	2 7 0..	⅝..	⅝ ¾ ..	0 3 6.. 0 1 0	—Feb. 1858
20000	Vale of Towy (lead), Carmarthen [S.E.]	0 13 6..	6s. ..	4s. 6s. ..	0 5 9.. 0 1 0	—July, 1858
1024	West Providence (tin), St. Erth	15 15 0..	33½..	..	33 1 9.. 0 10 0	—April, 1857
240	Wheal Bal (tin), St. Just	15 0 0..	16 ..	..	4 0 0.. 1 0 0	—Feb. 1859
4096	Wheal Edward (cop.), Calstock [S.E.]	7 7 6..	2½..	2 ..	0 5 0.. 0 5 0	—Mar. 1858
1024	Wheal Grylis (tin), Perranuthnoe	1 4 0..	4 ..	4¾ 5¼ ..	1 12 0.. 0 7 6	—Nov. 1859
8000	Wheal Kitty (tin), St. Agnes	4 16 6..	¾..	..	0 18 6.. 0 2 0	—July, 1860
345	Wheal Lovel (tin), Wendron	33 0 0..	7 ..	..	31 0 0.. 1 0 0	—Sept. 1856
1024	Wheal Margery (tin, copper)	15 13 0..	6 ..	..	0 10 0.. 0 10 0	—May, 1860
396	Wheal Seton (tin, copper), Camborne	58 10 0..	80 ..	80 85 ..	131 15 0.. 1 10 0	—Dec. 1859
1040	Wh. Trelawny (sil.-ld.), Liskeard [S.E.]	5 17 0..	14 ..	13 14 ..	43 15 0.. 1 0 0	—Oct. 1860
1022	Wheal Tremayne (tin, cop.), Gwinear	13 2 6..	5 ..	..	10 2 6.. 0 7 6	—Jan. 1854
4096	Wheal Wrey Consols (lead), St. Ive	3 9 0..	⅜..	..	2 12 6.. 0 2 6	—Dec. 1857

FOREIGN MINES.

2464	Burra Burra (cop.), South Australia	5 0 0..	135 ..	..	265 0 0.. 5 0 0	—June, 1861
12000	Cobre Copper Co. (cop.), Cuba [S.E.]	40 0 0..	37 ..	35 37 ..	97 12 0.. 1 0 0	—July, 1861
10000	Copiapo Mining Company, Chili [S.E.]	16 0 0..	8 ..	..	6 8 0.. 0 5 0	—Jan. 1861
15000	East Indian Coal, Calcutta [L.]	10 0 0..	10 ..	..	7½ per cent.	— Yearly.
70000	English and Australian [S.E.]	5 0 0..	3½..	..	1 5 0.. 0 2 6	—Aug. 1861
25000	Gen. Mining Assoc., Nova Scotia [S.E.]	20 0 0..	24 ..	22 24 ..	18 5 0.. 1 0 0	—June, 1861
68000	Kapunda Mining Co., Australia [S.E.]	1 0 0..	2¼..	2 2¼ ..	0 8 0.. 0 2 0	—June, 1861
15000	Linares (id.), Pozo Ancho, Spain [S.E.]	3 0 0..	7½..	7¾ 7¾ ..	8 6 2.. 0 3 4	—July, 1861
10000	Lusitanian (of Portugal) [S.E.]	2 0 0..	2 ..	1¾ 2¼ ..	0 18 9.. 0 1 6	—Aug. 1861
103815	Mariquita and New Granada [S.E.]	1 0 0..	⅛..	⅜ ..	0 9 6.. 0 1 6	—July, 1859
100000	Port Phillip (gold), Clunes [S.E.]	1 0 0..	1 ..	..	0 4 0.. 0 1 0	—July, 1861
11000	St. John del Rey [L.], Brazil [S.E.]	15 0 0..	39 ..	38 39 ..	43 5 0.. 2 10 0	—June, 1861
20000	West Canada Mining Company [L.]	1 0 0..	1¼..	..	0 2 0.. 0 2 0	—June, 1860

FOREIGN MINES WITH DIVIDENDS IN ABEYANCE.

10000	Alten and Quamangen Unl. (cop.) [L. £5]	4 10 0..	3 ..	..	4 5 0.. 0 15 0	—Nov. 1853
10000	Gt. Barrier Land, Min. &c., N. Ze. [L. £5]	4 10 0..	3½..	..	15 per cent.	—May, 1859
10000	Pontgibaud (sil.-lead), France [S.E.]	20 0 0..	4 ..	..	1 0 0.. 1 0 0	—June, 1855
43174	Unit. Mexican (sil.), Mexico [S.E.] Av.	28 5 0..	5½..	5¼ 6 ..	1 16 6.. 0 4 0	—Feb. 1853

NON-DIVIDEND FOREIGN MINES.

Shares.	Mines.	Paid.	Last Pr.	Bus. done.	Last Call.
20000	Australian (copper), South Australia [S.E.]	7 7 6..	1¼ ..	..	—Sept. 1858
75000	Bon Accord, South Australia (copper) [L. £1] [S.E.]	0 17 6..	1½ ..	1 1¼ ..	—Dec. 1860
6000	Central American (silver) [L.]	5 0 0..	8½ ..	..	—Feb. 1859
17000	Central Italian (copper) [7000 £2 paid]	0 6 0..	— ..	..	—Jan. 1859
60000	Clarendon Consols (copper), Jamaica [S.E.]	0 17 6..	⅜ ..	..	—Jan. 1861
10000	Copiapo Smelting [L.], Chili	10 0 0..	8½ ..	..	—Fully paid.
75000	Don Mountain (copper), New Zealand [L.] [S.E.]	1 0 0..	1 ..	⅝ ⅞ ..	—Fully paid.
30000	East Kongsberg Native Silver Mining Co. of Norway [L. £5]	1 0 0..	¾ ..	..	—April, 1861
30000	Ellersilie and Bardowie, Jamaica	0 18 0..	1½ ..	..	—July, 1859
8000	English and Canadian Mining Company [L.]	5 0 0..	— ..	..	—Fully paid.
25000	Fortuna (lead), Spain [L.] [S.E.]	2 0 0..	2½ ..	..	—Fully paid.
80000	Great Northern (copper), South Australia [L. £2] [S.E.]	1 0 0..	1½ ..	1¾ 1¾ ..	—
4000	Hope Silver-Lead and Copper Mining Co. [L.], Jamaica	25 0 0..	— ..	..	—Fully paid.
50000	Imperial Thessalian (lead, &c.), Thessaly [L. £2]	0 10 0..	⅜ ..	..	—June, 1860
30000	Lagunazo (sulphur, copper), Portugal [L. £1]	0 10 0..	½ ..	..	—May, 1861
80000	New Granada (gold), South America [S.E.]	1 0 0..	¼ ..	..	—Fully paid.
10000	New Grand Duchy of Baden (silver-lead), near Freiburg	1 0 0..	1 ..	..	—Nov. 1858
60000	North Rhine Copper of South Australia [L. £1] [S.E.]	0 12 6..	⅜ ..	..	—June, 1860
15000	Pachuca Silver Mining Company, Mexico [L. £1]	0 10 0..	1½ ..	..	—April, 1861
80000	Scottish Australian Mining Company [L. £1]	0 10 0..	⅜ ..	..	—Nov. 1858
15000	South Europe Mining Company, Spain [L. £5]	3 0 0..	— ..	..	—May, 1860
50000	St. John's United (copper, lead), Newfoundland [L. £1]	0 10 0..	⅝ ..	..	—Mar. 1860
45000	Victor Emanuel, Italy [L.] [20,000 Pref. Shares, 5s. pd., 25,000 £1 pd.	..	1⅞ ..	..	—
1000	Western Africa Malachite (copper) [L.]	110 0 0..	— ..	..	—Oct. 1859
12000	Wheal Ellen, South Australia [L. £5]	4 0 0..	2¾ ..	..	—July, 1861
35425	Wheal Jamaica (copper)	1 0 0..	18s. ..	..	—Fully paid.
80000	Worthing (copper), South Australia [L.] [S.E.]	1 0 0..	⅝ ..	11s. 12s.	—Fully paid.

PROGRESSIVE MINES.

Shares.	Mines.	Paid.	Last Pr.	Bus. done.	Last Call.
4825	Abbey Consols (id.) Cardigan	2 7 0..	1 ..	..	—Nov. 1860
1000	Allt-y-Crib (lead) [L. £5]	2 8 6..	2 ..	..	—June, 1861
10000	Angarrack (copper), Phillack	1 1 6..	1½..	..	—June, 1859
1000	Ashburton United (cop., tin)	11 10 0..	14¾..	..	—Mar. 1860
10000	Bampfylde (copper), Devon	0 15 0..	4 ..	..	—Aug. 1860
4000	Bedford Consols (copper)	1 19 6..	4s. ..	3s. 4s. ..	—July, 1861
2000	Berehaven (copper), Ireland	1 0 0..	1¼..	..	—
6000	Bickerton (copper) [L.]	1 0 0..	— ..	3¼ ..	—Sept. 1861
7500	Bickleigh Vale Phœnix [L.]	2 0 0..	2¼..	..	—Fully paid.
200	Billins (lead) [L. £30]	20 0 0..	20 ..	20 ..	—Feb. 1861
10000	Borlase Con. (tin), St. Just [L.]	1 0 0..	1¼..	..	—Fully paid.
1248	Boscaswell (tin), Penzance	6 5 0..	8 ..	..	—Dec. 1860
2280	Boscundle (tin, cp.), St. Austell	6 15 0..	4 ..	..	—Sept. 1860
160	Bosorne & Bollowall, St. Just	6 5 0..	10 ..	..	—Dec. 1860
5000	Bosworthan (tin), Sancreed	1 0 0..	1¼..	..	—June, 1860
5000	Bottle Hill (tin), Plympton	1 0 0..	1 ..	..	—
12000	Brea Con. (tin), St. Ives [L. 30s.]	1 0 0..	22s. ..	..	—Jan. 1861
5000	Bronfloyd (id.), Cardigan. [L.]	2 0 0..	4¼..	..	—June, 1861
112	Bron-Hanlog (id.), Denbighsh.	20 0 0..	20 ..	..	—No call.
4000	Brookwood	1 5 0..	3½..	..	—Mar. 1861
1200	Brynfelin [L.] [600 £1, 600 £5 pd.]	.. —	..	..	—April, 1861
500	Bryn Gwlog (lead), Flint	4 0 0..	26 ..	23 25 ..	—Oct. 1859
2000	Bryntail, Llanidloes, Montgo.	5 7 0..	4 ..	..	—Aug. 1861
5850	Budnick Consols (tin), Perran	1 2 0..	⅛..	¼ ⅜ ..	—June, 1861
6380	Buller and Basset Unit. (cop.)	3 5 0..	1½..	..	—June, 1861
2448	Bwich (sil.-ld), Cardiganshire	4 9 0..	2¾..	..	—Nov. 1860
4096	Calstock Consols (copper)	5 10 0..	6s. ..	¼ ⅜ ..	—Dec. 1860
915	Calvadnack, Wendron	18 5 0..	9 ..	8 9 ..	—Mar. 1861
1000	Camborne Consols (copper)	16 10 0..	8 ..	..	—June, 1861
4600	Camborne Vean & Wh. Francis	7 12 4..	2¼..	2 ..	—July, 1861
914	Caradon Cons. (cop.), St. Cleer	22 7 0..	8¼..	8¼ 8¾ ..	—Sept. 1861
1000	Cardigan Consols [L. £10]	7 0 0..	9 ..	..	—Mar. 1861
916	Cargoll (silver-lead), Newlyn	15 5 7..	15 ..	..	—Sept. 1860
6000	Carn Camborne	0 7 0..	13⅝..	1⅛ 1⅜ ..	—May, 1861
4370	Carnewas (id., cop.), Mawgan	1 3 0..	3½..	..	—June, 1861
3000	Carn Vivian (tin, cop., lead)	1 19 6..	2½..	..	—April, 1861
7000	Carrack Dews	2 16 0..	1 ..	..	—April, 1861
1056	Carvannall (cop.), Gwennap	21 11 7..	3 ..	..	—Dec. 1860
10000	Carway and Duffryn [L.]	5 0 0..	5 ..	..	—Fully paid.
20000	Carysfort (cop., id.) [L. £2½]	0 10 0..	8s. 6d..	..	—Mar. 1859
25000	Casara (lead), Carma. [L. £1]	0 8 0..	12s. ..	..	—Dec. 1860
10000	Castleward, Ireland [L. £1]	0 10 0..	18s 6d..	..	—
2500	Cefn Cilcen (lead), Flintshire	1 5 0..	1 ..	..	—Sept. 1860
4000	Clara United (sil.-ld.) [L. £3]	2 0 0..	1¾..	..	—July, 1861
984	Clijah & Wentworth (tin, cp.)	28 0 6..	2 ..	..	—May, 1861
6000	Clinton and Edgecombe United	1 0 0..	1½..	..	—Oct. 1860
3135	Coed Mawr Pool (lead) [L.]	4 7 0..	4 ..	..	—June, 1861
2560	Colomendy (lead), near Mold	1 0 0..	21s. ..	..	—No call.
5000	Cornubia (tin), Roche	0 15 0..	1 ..	..	—April, 1861
10000	Craigton (id.) [L. £1], Kirkcud.	0 10 0..	¾..	..	—June, 1859
906	Crane (copper), Camborne	8 0 0..	6½..	..	—July, 1861
30000	Craven Moor (id.), Yorkshire	0 10 0..	4s. ..	3s. 4s. ..	—No call.
12000	Crelake (cop.), Tavistock	— ..	3 ..	..	—No call.
8000	Crookhaven (cop.) [L. £2½]	1 0 0..	½..	..	—Mar. 1861
2000	Crowlwm (lead), Llanidloes	1 10 0..	⅞..	..	—No call.
6000	Crowndale (cop.), Tavistock	0 11 0..	3 ..	..	—Nov. 1858
6000	Cuddra (cop., tin), St. Austell	2 4 0..	1⅞..	2 2¼ ..	—Aug. 1861
7000	Cwm Afon (cp.), Festi. [L. £1]	0 19 0..	— ..	..	—Dec. 1860
21000	Dale, North Staffordshire [L.]	1 0 0..	¾..	..	—Fully paid.
4817	Devon and Courtenay (cop.)	1 9 0..	11s. ..	..	—Mar. 1861
5000	Devon Great Wheal Ellen	2 0 0..	— ..	..	—Mar. 1861
12000	Dev. New Copper Co. [L. £2]	— ..	2 ..	..	—
12000	Devon Union (copper) [L. £1]	0 12 6..	¾..	..	—May, 1861
4566	Devon Wheal Buller (copper)	3 11 6..	¾..	..	—Aug. 1861
1000	Durlo (tin), Leiant	6 12 0..	7½..	..	—Mar. 1861
2000	Dolcoath United [L. £5]	1 0 0..	2¾..	..	—June, 1860
5000	Dulta (tin), [2048 £⅞ pd., 2952 £¼ pd.]	.. —	..	..	—
3000	Dyfngwm (lead), Wales	12 6 6..	9½..	..	—Sept. 1858
244	Eaglebrook (lead.), Cardigan	75 10 0..	12 ..	..	—June, 1861
4096	East Alfred Consols (copper)	3 16 8..	31s. ..	1⅛ 1⅜ ..	—Sept. 1861
3000	E. Beam (tin), St. Aus. [L. £2]	0 10 0..	1¼..	..	—Aug. 1861
6000	E. Bertha Con. (cop.), Tavist.	0 17 0..	1½..	..	—July, 1861
6000	East Budnick and Mount	0 10 0..	9s. ..	..	—Jan. 1861
6000	East Carn Brea (cop.) Redruth	3 5 0..	8¼..	8 8¼ ..	—June, 1861
6400	East Crinnis and South Par.	2 7 6..	2 ..	..	—May, 1861
4000	East Devon Gt. Consols (cop.)	0 13 6..	2½..	..	—Sept. 1861
4000	East Fowey (cop.) [L. 50s.]	1 5 0..	1½..	..	—June, 1861
6000	E. Grenville (cop.), Camborne	0 16 6..	2 ..	39s. 41s. ..	—July, 1861
4000	E. Gunnis Lake & S. Bedf. (cp.)	6 7 6..	¾..	½ ¾ ..	—Mar. 1861
12000	East Mona (cop., &c.) [L. £1]	0 5 0..	— ..	..	—May, 1861
8000	East Polberro, St. Agnes	0 5 0..	⅛..	..	—May, 1861
4096	E. Providence (tin), Uny Lel.	2 3 5..	1¼..	2¼ 2¼ ..	—June, 1861
6000	E. Releath (tin, cop.), Wendron	0 1 0..	1 ..	..	—Aug. 1860
5000	E. Rosewarne (cp., tin), Gwin.	2 10 0..	1¼..	1¼ 1⅜ ..	—May, 1860
1122	East Seton, Camborne	0 2 0..	— ..	..	—May, 1861
256	East Tolgus (copper), Redruth	60 0 0..	52 ..	..	—June,